MINISTRY OF NATURAL RESOURCES

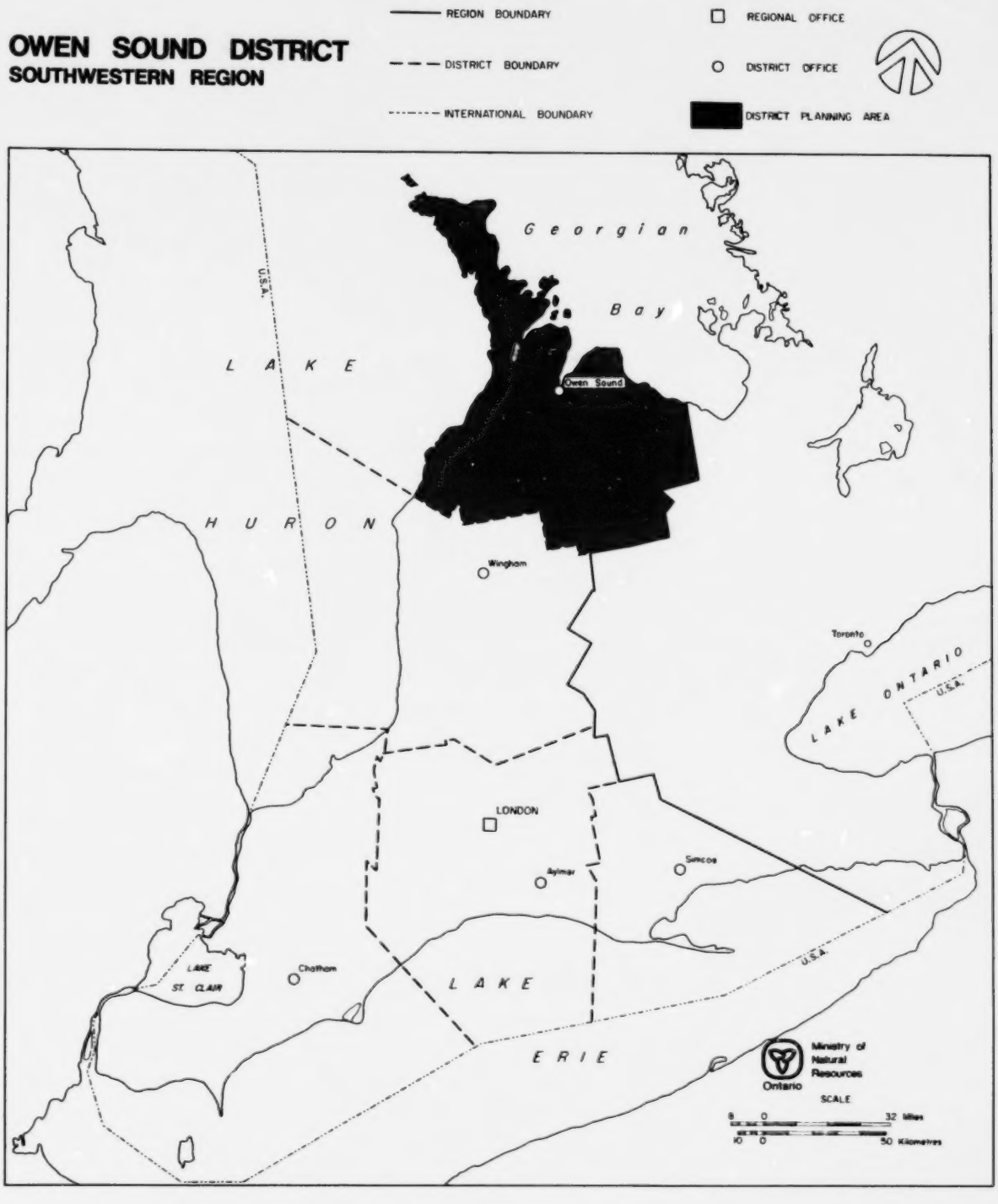
Owen Sound District

LAND USE GUIDELINES

Ontario
Ministry of Natural Resources
Hon. Alan W. Pope
Minister
W. T. Foster
Deputy Minister

1983

OWEN SOUND DISTRICT
SOUTHWESTERN REGION



FOREWORD

The Ministry of Natural Resources has a primary responsibility for the management of the province's natural resources, in particular those related to resource development and outdoor recreation.

This document will serve as the overall design for integrated resource development in the Owen Sound District. It is also intended to provide others with an understanding of the ministry's mandate and its programs which rely on both Crown and private lands for success.

To ensure an integrated approach the *Owen Sound District Land Use Guidelines* identify where and in what manner the ministry may use Crown land, and to what extent it may wish to suggest uses of private land, in working towards the achievement of ministry objectives.

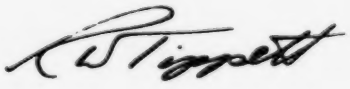
For Crown land the ministry must consider the land and water requirements for both its own programs and those of other government agencies. This will require ongoing liaison with these other agencies. The ministry will continue to consult with private landowners and local municipalities since the latter have the responsibility for control of private land use.

The program targets and approaches outlined in this document follow the overall direction outlined in the ministry's *Southern Ontario Co-ordinated Program Strategy.* The *Land Use Guidelines* may serve as one of the sources of information for ministry involvement in the planning process of municipalities and other agencies. It is recognized, however, that this document has no legal status.

Planning is a continuous process and must be responsive to changing needs, information and technology. Thus the targets and guidelines presented in this document are subject to revision based on such factors as changes in government policy, new or refined resource information, and significant changes to land use in other planning documents. To accommodate changes the *Land Use Guidelines* will normally be reviewed every ten years and will involve full public consultation.

Comments may be addressed to the District Manager at any time.

Regional Director
Southwestern Region



District Manager
Owen Sound District

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I INTRODUCTION

The goal of the Ministry of Natural Resources is to provide opportunities for outdoor recreation and resource development for the continuous social and economic benefits of the people of Ontario and to administer, protect and conserve public lands and waters.

The ministry has programs to ensure the wise management of both renewable and non-renewable resources. It regulates the use of these resources for the long term benefit of the people of Ontario.

The ministry recognizes that outdoor recreation is important for tourism and social well-being. It also recognizes that physical, biological, cultural and historical resources are important elements in the environment and that representative and unique components should be protected.

The ministry has two responsibilities in land and water management. The first is custodial, to protect the capability and quality of public land and water; the second is to participate with other agencies in the planning and control of the total land area.

In order that these programs might better achieve that goal, the ministry has developed an integrated land use planning system. This system comprises a hierarchy of strategies and guidelines for the province, for the southern, northeastern and northwestern planning regions, and for the ministry's 47 administrative districts which state in broad and comprehensive terms how the ministry wishes to use or influence the use of lands and waters.

The ministry's direction for southern Ontario was published in 1982 after public review. That document, the *Southern Ontario Co-ordinated Program Strategy*, provides the basis for the policies, targets and guidelines which are adopted by each district in southern Ontario.

The purpose of this report is to define the program objectives, targets and guidelines that Owen Sound District may adopt in order to achieve its contribution to the targets in the *Co-ordinated Program Strategy*. The guidelines for the district identify:

- the targets which are achievable for each program;
- generally where these targets are to be achieved;
- methods for the implementation of these targets including how the ministry plans to work with conservation authorities, municipalities and individual landowners; and
- how the ministry programs could be integrated.

The *Land Use Guidelines* have no legal status. The planning control of private land in municipalities is exercised by those municipalities under the authority of the *Planning Act* administered by the Ministry of Municipal Affairs and Housing.

The ministry recognizes that private landowners, other government agencies, municipalities, conservation authorities and interest groups are key partners in any effort to achieve effective and coordinated resource management. The ministry plans to continue to work with these groups, especially with municipalities through the ministry's plan input and review program to ensure that resource values are considered in local planning documents.

There will be instances when the ministry and others, for example another government agency, will have different intentions for the same area. When such situations are identified the ministry proposes to enter into negotiations to arrive at an acceptable solution.

Two major proposals by other government agencies are being developed within Owen Sound District. The first is that undertaken by the Niagara Escarpment Commission. The Commission's proposed plan reflects the information presented by the Ministry of Natural Resources during the Commission's public hearings. The proposed plan will have a significant impact on the *Land Use Guidelines*. The ministry proposes to incorporate the approved policies and land use designations in the *Land Use Guidelines*. The

second major proposal is the national park for Lindsay and St. Edmunds townships in the Bruce Peninsula. If the proposed park is established, the ministry plans to revise the *Land Use Guidelines* accordingly.

Public comment on background information for district planning was solicited in June 1982. At that time the public was asked to comment on the accuracy of the ministry's information and to provide any additional knowledge they had of the planning area and raise any problems or issues they felt should be addressed during the planning process.

In July, 1982 a draft *Owen Sound District Land Use Strategy* was released and in August additional open houses were held to explain the direction proposed in the strategy and invite public comment. In addition to receiving many verbal and written comments as a result of the open houses, the ministry held follow-up meetings with municipalities and interest groups at their request.

Based on the analysis and evaluation of the public input received, this document was prepared. Copies of comments received are available for viewing in the Owen Sound District office, the Southwestern Region office, the ministry's main office public reading room and the Legislative Library at Queen's Park. Details of the public consultation program are found in an appendix to this report.

The *Land Use Guidelines* which follow outlines how the ministry hopes to achieve its targets in Owen Sound District. The benefit of using targets is that it provides a measurable indication of the degree of achievement of certain ministry program policies.

It is not intended, however, that all targets be achieved immediately. The intent is to aim for target achievement over the next 20 years (40 years for the timber program). However, a number of factors may affect achievement of the stated targets including:

- validity of the original assumptions on which the target was based;
- Legislative approval of necessary funding and staffing required to carry out the level of resource management on which target achievement is based;
- changing economic and social conditions on a local or provincial basis;
- new or improved inventory and information which could result in a change of the original estimates; and
- additional analysis of original information.

The *Owen Sound District Land Use Guidelines* are best viewed as a document which will be subject to considerable monitoring and review as the ministry proceeds with application.

The Owen Sound District is composed of all of Grey County and Bruce County except for the four most southerly townships (Huron, Kinloss, Culross and Carrick).

The district is characterized by rolling pastures and cropland in the south, the rugged, forested country of the Bruce Peninsula and the promontories and glens of the Niagara Escarpment, overlain with an intricate web of coldwater streams and small inland lakes.

Approximately 30 percent of the district is under forest cover. The hardwood stands support a fine furniture industry in the southern part of the district while the conifer on the Bruce Peninsula provides many white-tailed deer hunting opportunities.

Fishing opportunities abound throughout the district while mineral resources range from decorative stone quarries to extensive aggregate areas.

Six provincial parks occur within the district providing opportunities for both camping and day use. Even more recreational opportunities are available on approximately 17,400 hectares of Crown land located throughout the Grey/Bruce area.

II THE GUIDELINES SUMMARIZED

Table 1 summarizes the targets for Owen Sound District. Present production and potential production are included along with the percentage of each target the ministry hopes to achieve in each of the four municipal planning areas as well as the percentage which could potentially be achieved on municipal, conservation authority, private and Crown land.

Figure 1 illustrates the distribution of targets by municipal planning area.

The details of each part of the table are to be found in the following sections of this report.

Figures 2 through 6 in Section IV show for each program (general recreation and land administration excepted) the extent of the ministry's present involvement in the district's land and water base. The areas shown on these maps include significant program areas, as well as other areas in which the ministry has significant resource interests.

The General Resource Areas map inserted in this document (Figure 7—in back pocket) highlights critical aspects of the district guidelines with brief descriptions of the general resource areas thus demonstrating the varying emphasis of ministry interests geographically throughout Owen Sound District.

TABLE 1 SUMMARY OF GUIDELINES

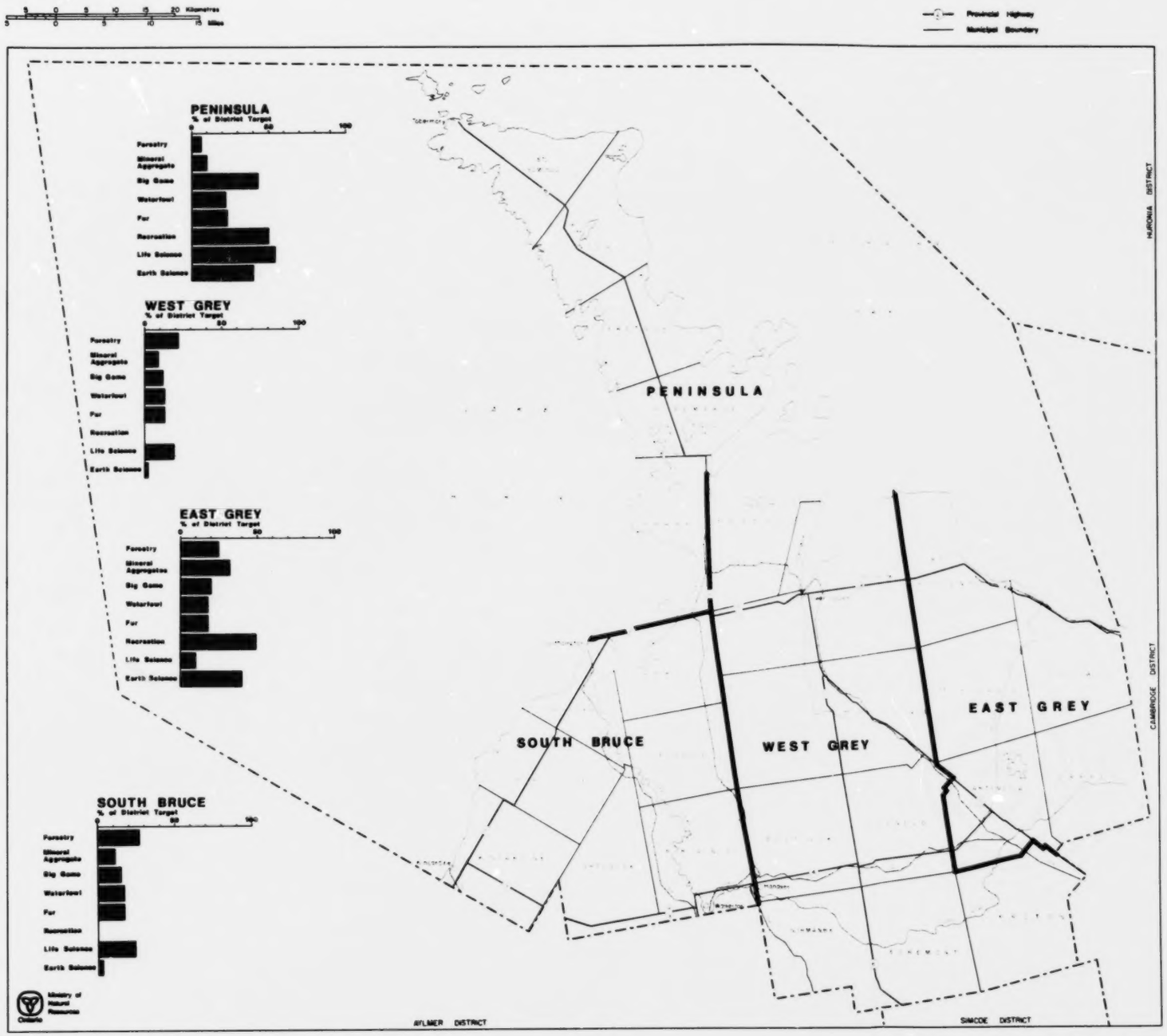
RESOURCE TARGET	RESOURCE ANALYSIS		RESOURCE LOCATION			TARGET ACHIEVEMENT BY OWNERSHIP			
	PRESENT	POTENTIAL	SIGNIFICANT PROGRAM AREA	PLANNING AREA	TARGET AS A % OF DISTRICT TOTAL	MUNICIPAL	CONSERVATION AUTHORITY	PRIVATE	CROWN
FORESTRY • 387,710 cubic metres per year	231,695 cubic metres per year	398,381 cubic metres per year	upland hardwood; lowland hardwood; plantation	1. Peninsula 2. South Bruce 3. West Grey 4. East Grey	6.7 23.0 44.7 25.6	35.0 5.0 12.0 11.3	6.4 7.2 11.0 11.5	52.8 87.6 77.0 70.2	5.8 .2 .06 7.0
MINERAL AGGREGATE • 89 million tonnes (cumulative)	4.8 million tonnes (annual)	4.9 billion tonnes (Primary sand and gravel)	primary resource areas	1. Peninsula 2. South Bruce 3. West Grey 4. East Grey	23.0 17.0 40.0 20.0	— — 1.0 2.0	7.0 1.0 3.5 4.0	91.0 99.0 95.5 92.5	2.0 — — 1.5
FISHERIES • Sport 1,039,600 opportunities	375,500 opportunities	1,039,600 opportunities							
• Commercial 714,800 kilograms	232,300 kilograms	714,800 kilograms							
• Bait Fish 445,000 dozen	99,000 dozen	445,000 dozen							
WILDLIFE • Big Game 35,000 opportunities	30,543 opportunities	42,900 opportunities	deer yards	1. Peninsula 2. South Bruce 3. West Grey 4. East Grey	42.6 15.3 20.5 21.6	13.5 1.0 1.0 19.0	4.8 6.0 6.0 7.5	65.2 75.0 93.0 59.0	16.5 18.0 — 14.5
• Small Game 120,690 opportunities	80,700 opportunities	151,900 opportunities	critical wildlife area						
• Waterfowl 28,990 opportunities	26,100 opportunities	41,200 opportunities	significant wetlands	1. Peninsula 2. South Bruce 3. West Grey 4. East Grey	23.0 16.0 40.5 20.5	— — — —	22.0 25.5 15.0 15.0	58.0 72.5 85.0 75.0	20.0 2.0 — 10.0

• Furbearers 35,000 pelts	34,529 pelts	40,000 pelts	significant wetlands	1. Peninsula 2. South Bruce 3. West Grey 4. East Grey	23.0 16.0 40.5 20.5	— — — —	22.0 25.5 15.0 15.0	58.0 72.5 85.0 75.0	20.0 2.0 — 10.0
PARKS & RECREATION • an additional 262,600 camping opportunities; 19,200 picnicking opportunities	216,000 camping opportunities 242,800 picnicking	no anticipated problems	two proposed parks	1. Peninsula 2. South Bruce 3. West Grey 4. East Grey	50.0 — — 50.0	— — — —	— — — —	— — — —	100 — — 100
Life Science Features			biological	1. Peninsula 2. South Bruce 3. West Grey 4. East Grey	52.3 18.6 17.0 12.1	16.0 0.0 10.0 28.0	1.5 21.3 19.0 12.0	54.0 78.7 71.0 49.0	28.5 0.0 0.0 11.0
Earth Science Features			geological	1. Peninsula 2. South Bruce 3. West Grey 4. East Grey	40.0 2.0 15.0 43.0	1.5 — — 35.0	2.5 — — 12.0	57.0 100.0 100.0 52.0	39.0 — — 1.0

OWEN SOUND DISTRICT

SUMMARY OF TARGETS

Figure 1



Direction for the ministry commitment to social and economic development and environmental protection is provided for in policies of general and specific nature. The general policies have application to all ministry program interests and deal with integrated resource management, public safety, environment and energy. The specific policies provide direction to the individual ministry programs of forestry, mineral aggregate, minerals and fossil fuels, fisheries, wildlife, provincial parks, general recreation and land administration.

A: integrated resources management

1. POLICY STATEMENT

Programs will be integrated to ensure the efficient use of land and water to achieve ministry objectives.

2. STRATEGY

In order to implement the integrated resource management policy, the ministry plans to:

- ensure that each ministry program contributes to or accommodates the objectives of other programs;
- set aside public lands for natural resource management purposes which will serve to achieve more than one program objective simultaneously and, where suitable, sequentially;
- continue to provide the public with information on the nature, extent, use, and management of the natural resource base of Owen Sound District. Particular emphasis will be given to information which will further public appreciation and landowner management of natural resources;
- permit interim use of candidate parks providing park values are protected. Uses and facilities which complement the achievement of park objectives will be encouraged; uses which have no significant negative impact on the long term achievement of park objectives will be permitted with judicious controls; and uses which would conflict with the long term achievement of park objectives will be prohibited;
- seek to integrate its resource management activities as much as possible with other agencies and private landowners, particularly the local conservation authorities and area municipalities; and
- seek to integrate the watershed planning program of the conservation authorities with the ministry's planning program.

Target testing and evaluation have demonstrated that the long term direction for ministry programs proposed in this document are achievable providing there is considerable program integration.

The ministry proposes to coordinate the plans for water management with the *Land Use Guidelines* and the plans and programs of conservation authorities, other ministries and municipalities.

B: public safety

1. POLICY STATEMENTS

The ministry will seek to eliminate loss of life and to minimize property damage and community disruption resulting from floods, erosion, earth slippage and forest fires.

The ministry will seek to eliminate injury and loss of life from hazards around abandoned pits, quarries and mine shafts and from abandoned oil and gas wells.

The ministry will promote the safe pursuit of outdoor recreation and resource production activities.

2. STRATEGY

The ministry plans to:

- ensure that new development avoids areas susceptible to flooding, erosion and earth slippage or occurs only with adequate protection and safeguards;
- participate in contingency planning, flood forecasting and provision of remedial works such as dams and channelization where development already exists within hazardous areas;
- participate in the mapping of floodplains and other hazardous sites in developed and in developing areas;
- prepare and implement a fire management plan for Crown lands and agreement forests;
- maintain an up-to-date flood emergency plan for the district;
- promote the hunter safety training program as part of the wildlife recreation program;
- ensure adequate safety measures are provided at abandoned pits and quarries through the mineral aggregates program; and
- ensure that abandoned gas and oil wells are properly considered in new residential and other development through minerals and fossil fuels program.

Provincial floodplain management policy will be implemented through co-operation with conservation authorities and municipalities. The ministry will seek improvements in stream flow forecasting, contingency planning, and emergency response through input to floodplain regulations and municipal plans and by-laws. Protection from the regional flood or the one-in-one hundred year flood is normally sought. The policy is that structural development should not occur on hazardous sites except in exceptional circumstances.

For erosion susceptible sites, 100 years of protection for development is the provincial standard.

The ministry will work with the Ministry of Labour to reduce hazards around abandoned pits and quarries.

The ministry will work with the Ministry of Municipal Affairs and Housing and municipalities in the review of development proposals to ensure protection from the above hazards and from dangers associated with abandoned oil and gas wells.

Forest fire management is an integral part of land and resource management. It is a responsibility of the ministry which is shared with municipalities and land owners.

Forest fire management is the strategy of fire control and fire use practiced in concert with land use objectives and conducted in a manner that considers environmental, social and economic criteria.

The fire management program of the ministry performs a support function that provides expert knowledge and specialized services in matters of fire control and fire use to groups within and outside the ministry. Those services relate to preventing the occurrence of wildfires, controlling those wildfires that threaten values, and using prescribed fire as an approved resource management technique.

The ministry may play a significant role in developing municipal expertise in minimizing risks and in fire and emergency planning.

C: environment

1. POLICY STATEMENT

The ministry will conduct its activities in an environmentally responsible manner.

2. STRATEGY

The ministry plans to:

- manage renewable resources on a biologically sound basis;
- manage non-renewable resources to meet current demands, giving attention to anticipated future needs. The ministry will encourage recycling and will discourage the use of high quality materials where lower quality materials would suffice;
- in conjunction with conservation authorities, manage and regulate watersheds including ground water recharge and source areas, valley lands and waterfront areas;
- encourage consideration of all wetland values in municipal planning and the planning of other agencies. A specific wetlands policy will be issued in the near future;
- identify and protect the habitat of provincially rare and endangered animals and plants;
- participate in monitoring the effects of contaminants, including acid rain, on natural resources;
- prepare and implement class and individual environmental assessments to meet the requirements of the *Environmental Assessment Act;* and
- recognize areas of natural and scientific interest in the management and implementation of its various programs.

Achievement of ministry targets is contingent upon a great many factors, not the least of which is the maintenance of a suitable environment. Of particular concern in this regard is the potential effect of acid rain. In Owen Sound District there is concern with respect to the possible direct effect of acid rain on vegetation.

Additionally there remains the concern for water quality throughout the lower Great Lakes, their watersheds and river basins.

The ministry will work closely with other government agencies to monitor the effect of contaminants such as acid rain on the achievement of ministry objectives.

D: energy

1. POLICY STATEMENT

The ministry will undertake its activities so as to contribute to provincial energy objectives.

2. STRATEGY

To achieve the energy objectives, the district plans to:

- ensure that energy potential is considered before a permanent commitment is made to *uses which exclude energy production*;
- examine incentives to increase the use and acceptability of wood as an energy alternative;
- as a by-product of forest management, fuelwood cutting will be promoted;
- install alternate heating systems and additional insulation at appropriate ministry facilities;
- examine and support projects which use waste heat or other waste energy sources for resource management activities;
- undertake inventories where requested and appropriate to determine resource supply and availability for energy needs; and
- encourage exploration (consistent with sound environmental practices) through the minerals and fossil fuels program which may supplement existing energy sources or provide alternative sources.

Throughout Section IV, the specific policies of each area of concern or program are presented individually under the headings Objectives, Targets, Discussion, Strategy and Integration.

Quantitative targets have been developed for each ministry program in southern Ontario, land administration and general recreation excepted; for example, forest resources targets are expressed in terms of cubic metres of wood per year.

Each program target has been evaluated in terms of the known capabilities and existing and anticipated use characteristics of the resource in the district. The information presented in the discussion sections is intended to demonstrate the extent to which the targets can be achieved.

Next, the strategy which the ministry intends to use in Owen Sound District in working towards achievement of the district targets is presented. The strategy outlines where within the district efforts to achieve the targets will be concentrated.

A major aim of this document is an integrated approach to program target achievement to ensure the efficient use of land and water. The information presented in the integration sections highlights where and how a particular program can assist the achievement of other ministry program interests.

A: forestry

1. OBJECTIVE

The objective for forestry in southern Ontario is to provide for an optimum contribution to the economy by forest-based industries consistent with sound environmental practices, and to provide for other uses of the forest.

2. TARGETS

The targets for forestry in Owen Sound District are:

- to produce an annual continuous supply of 387,710 cubic metres (13,700,000 cubic feet) of wood for industrial purposes by the year 2020 while maintaining the present diversity of forest products; and
- to make the maximum contribution from forest production to the achievement of the provincial energy target. In southern Ontario this is estimated to be 2 percent or more of total energy needs by the year 2000.

3. DISCUSSION

Present annual production is 231,695 cubic metres net merchantable volume of fibre while the potential is 398,381 cubic metres per year. The target of 387,710 cubic metres per year represents

97.3 percent of the potential production.

Although the area of forest has remained stable over the past 20 years, poor management and over-cutting has reduced the quality (especially log size) and quantity of hardwoods while the demand for material has increased. Achievement of the target assumes management of the existing hardwood forests and continued reforestation efforts.

On Crown lands and all agreement forests, management plans will outline the contribution of these lands to the production targets.

The *Woodlands Improvement Act* and forest advisory service will be promoted.

The management of existing hardwood forests will be a high priority. Municipalities will be encouraged in planning to include policies and maps which reflect the economic importance and location of their significant forest resources; and the management of hardwood forests will be promoted through annual education days with municipal representatives. To increase stand improvement on existing hardwood forests, fuelwood cutting will be actively encouraged. Conservation authorities will be encouraged to contribute to the management of hardwood forests on non-agreement lands and private land, where appropriate, through such mechanisms as information exchange, consultation and demonstration projects.

Softwood management, including a study to determine key planting sites, will be undertaken. Class 1 to 3 agricultural land, areas for future gravel extraction, and estate residential as well as shallow bedrock areas are to be avoided. Upland sites in south Grey and south Bruce Counties within the loam soil series are generally preferable. The ministry will continue to concentrate its planting program on sites larger than four hectares (10 acres) and plan on stand conversion to hardwoods when suitable. Conservation authorities will be encouraged to complement this reforestation effort by planting on smaller sites.

4. STRATEGY

- In order to achieve the target, production is planned to come from the existing hardwoods and softwood plantations.
- The ministry proposes to achieve 45 percent of the target from west Grey County, 26 percent from east Grey County, 23 percent from south Bruce County and 6 percent from the Bruce Peninsula (Figure 2).
- The ministry proposes to achieve 76 percent of the target from private land, 12 percent from county land, 6 percent from conservation authority land, 2 percent from Crown land and 4 percent from other forms of ownership.

5. INTEGRATION

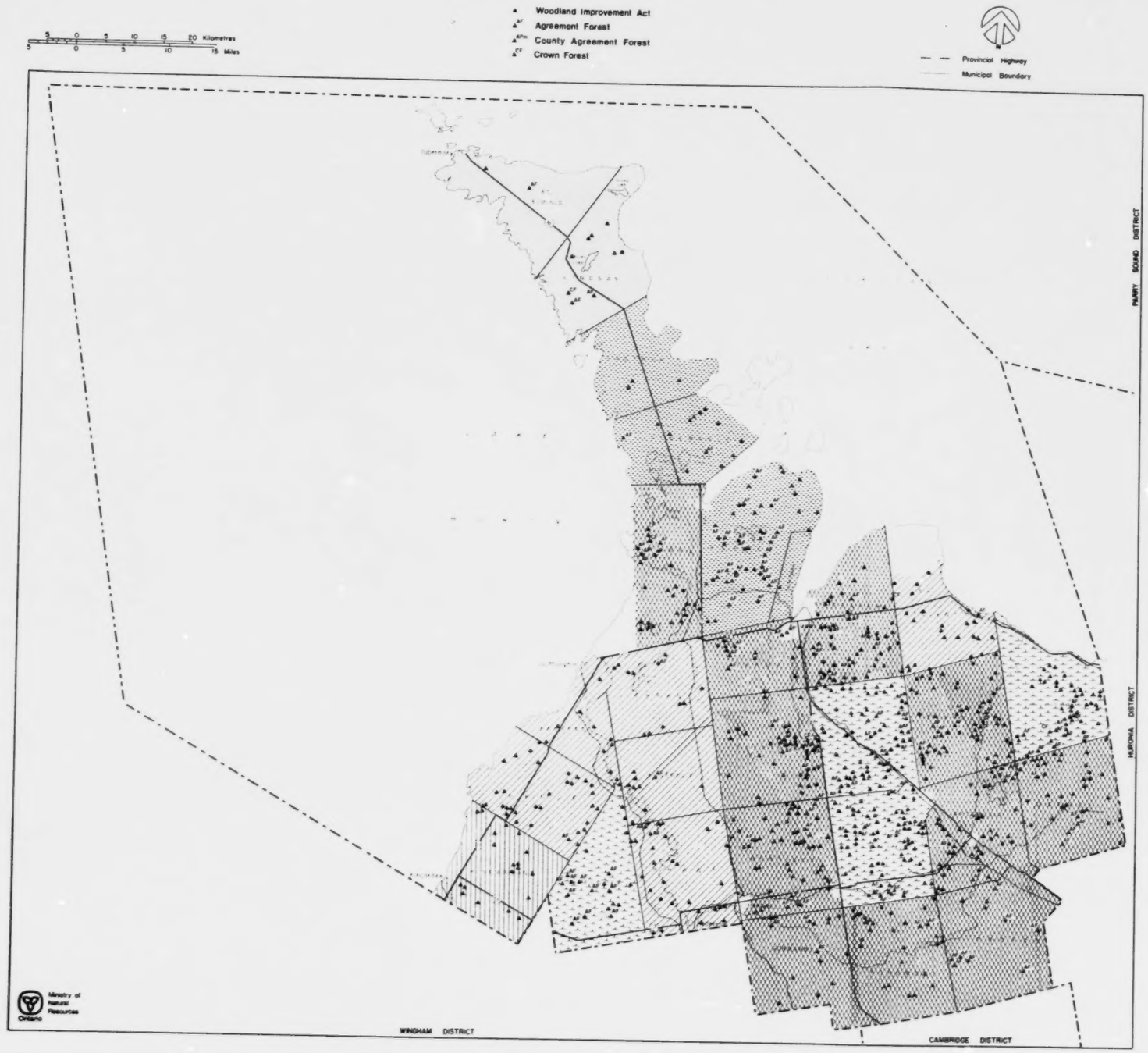
Forest management plans will be prepared for all forest agreement areas and Crown lands. These plans will contribute to the protection of earth and life science features; allow for hunting, trapping, fishing and mineral resource extraction; ensure protection of wildlife habitat and coldwater streams; provide for recreational trail opportunities, water retention and soil conservation.

Until management plans are prepared, forest operational programs will be done in concert with other programs to either enhance the benefits derived or to minimize the negative impacts.

Reforestation will consider other program interests such as planting along streams to mitigate erosion, aid flood control, enhance coldwater restricted areas, provide desirable wildlife habitat and avoid areas such as those currently licenced under the *Pits and Quarries Control Act*.

OWEN SOUND DISTRICT
FOREST RESOURCES PROGRAM

Figure 2



B: mineral aggregate

1. OBJECTIVE

The objective for mineral aggregate production in southern Ontario is to meet anticipated future demand with minimal disturbance to natural and cultural resources and the social environment.

2. TARGET

The target for mineral aggregate in Owen Sound District is to ensure a total cumulative supply of 89 million tonnes of sand, gravel, and crushed stone for the period 1982 to 2000.

3. DISCUSSION

Nine townships in Owen Sound District were only recently designated under the *Pits and Quarries Control Act* and the first complete set of annual production summaries will only become available during 1983 after final review of this document. However, based on data supplied in licence applications it is estimated that production of sand, gravel, and crushed stone in Owen Sound District totalled approximately 3.8 million tonnes in 1980. The 177 licenced and wayside pits produced about 3.6 million tonnes of sand and gravel. Production of crushed stone from one licenced quarry totalled approximately 200,000 tonnes. Nearly 6000 tonnes of clay were produced from a licenced pit near Meaford and utilized in the production of drain tiles. Another manufacturer of drain tile at Paisley utilizes a local deposit of clay. Also, nine licenced quarry operations in the Wiarton-Owen Sound area utilize local bedrock formations for the production of building and decorative stone; production in 1980 totalled approximately 27,000 tonnes.

Since the June, 1982 draft *Land Use Strategy* was prepared, provisional estimates of the district's aggregate resources have been compiled. It is estimated that the existing licenced pits and quarries have the potential to produce approximately 429 million tonnes of sand and gravel and 18 million tonnes of crushed stone within currently licenced areas. The building/decorative stone quarries are estimated to contain reserves of approximately 11 million tonnes in currently licenced areas. Clay reserves have not been calculated.

Primary sand and gravel and crushable stone resource areas have also been delineated. Ideally, primary sand and gravel resource areas are 6 metres or greater in thickness, contains 35 percent or more gravel of which at least 20 percent is crushable (greater than 2.5 centimetre size), and are of a size and quality sufficient to sustain a commercial operation. Ideally, primary bedrock resource areas are 18 metres or greater in thickness, are covered by less than 6 metres of overburden, contain crushable stone suitable for road construction, concrete, asphalt, cement or lime, and are of a size and quality sufficient to sustain a commercial operation. The primary resource areas indicated on Figure 3 also include deposits of lesser size and technical specifications in local areas where good quality sand and gravel and crushable stone are lacking. It is estimated that primary sand and gravel areas in Owen Sound District, excluding licenced areas, have the potential to produce approximately 4,480 million tonnes. An estimate of potential production of crushable stone is not provided as assessment and inventory of this resource is incomplete.

Since the publication of the June 1982 draft *Land Use Strategy*, a target of 89 million tonnes of sand, gravel and crushable stone was identified as representing an equitable Owen Sound District contribution to the achievement of the mineral aggregate production target for southern Ontario. The preceding information suggests that the target is readily achievable from existing licenced areas, which have a potential of nearly five times the volume of the target.

Achievement of the target requires that existing licenced pits and quarries will be protected from incompatible land uses through formulation with municipalities of suitable official plan policies and zoning by-laws. As a means of providing for the future it is often necessary to maintain the

resource potential of more aggregate resources than the target would suggest. The ministry cannot guarantee continued or future use or level of production from existing licenced operations or primary resource areas. Also, mineral aggregate is a non-renewable resource. Demand for aggregate will not cease in the year 2000. While it is unreasonable to make projections beyond that date it will be necessary to identify primary resource areas which include areas with the best potential to meet needs beyond 2000, and to encourage land uses in these areas which would not preclude extraction at some future date.

It must be emphasized that protection does not necessarily mean extraction. The ministry is seeking to identify and maintain the potential of sufficient aggregate to meet the target and to keep future options open. As such, the ministry is not seeking land use designation of large areas as "aggregate extraction"—rather, it is seeking, where possible, designations such as agriculture and forestry, which provide for ongoing uses without closing the door on the future.

The feasibility of utilizing the large, good quality reserves of west Grey County to supply regional or provincial needs was examined in the *Bulk Transportation Study*, a joint Ministry of Natural Resources and Ministry of Transportation and Communication study. It was found to be economically unattractive at this time.

4. STRATEGY

- The ministry plans to achieve the mineral aggregate production target from the existing licenced pits and quarries, existing and future wayside pits, and future pits and quarries within primary aggregate resource areas. In addition, to ensure the availability of adequate supplies of mineral aggregate beyond the year 2000, the ministry is seeking to identify and maintain the potential of sufficient aggregate to meet the target and keep future options open.
- In order to implement these policies and targets, the ministry plans to:
  - protect legally existing extraction operations;
  - protect additional high potential aggregate areas by encouraging municipalities to apply land use designations in official plans, such as forestry or agriculture, which do not preclude the future option of aggregate extraction;
  - monitor production of aggregate within the district. Demand projections will be reviewed on a five-year basis with necessary adjustments made in the target;
  - inventory and assess aggregate resources; and
  - ensure that aggregate extraction activities are carried out in a manner that will minimize disturbance to the natural, cultural and social environment. Through enforcement of existing legislation it will be ensured that lands affected by extraction are rehabilitated to a use or condition that is compatible with the use of adjacent land. Progressive rehabilitation will be encouraged to the greatest extent possible.

There are large variations in current production levels and calculated production potential within the different areas of Owen Sound District. Based on 1981 production from licenced and wayside pits, and production from one licenced crushed stone quarry, the ministry proposes to achieve 36 percent of the target from West Grey, 26 percent from East Grey, 19 percent from South Bruce, and 19 percent from Bruce Peninsula. The ministry plans to emphasize the protection of lower quality aggregate resources in addition to high quality, primary resources, in areas known to be deficient. Inventory, assessment and identification of aggregate deposits within these areas will be given priority in mineral resource studies conducted by the ministry.

5. INTEGRATION

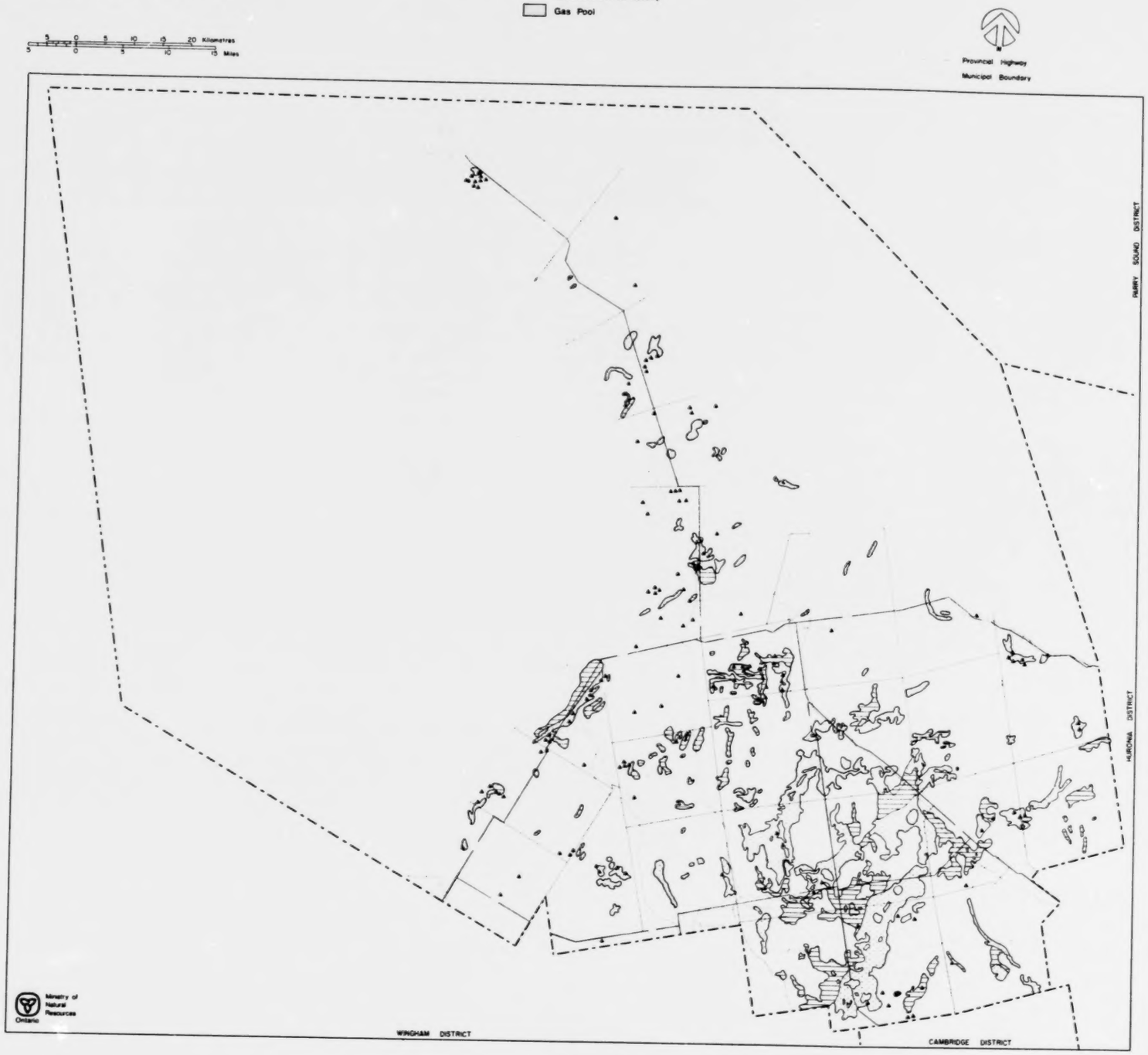
The mineral resources program will consider all other ministry programs prior to licencing pits or quarries. Sequential land use will be promoted and rehabilitation will be encouraged. Rehabilitation of a pit or quarry, once extraction is completed, to land uses such as agriculture, forestry, recreation, and housing is feasible and can achieve many of the objectives of municipal official plans and zoning by-laws. Mineral resource exploration and development will utilize methods which have minimum impact on life science areas and areas of significance to fish and wildlife, and forestry programs.

OWEN SOUND DISTRICT

MINERAL AGGREGATE RESOURCES PROGRAM

FOSSIL FUELS PROGRAM

Figure 3



Note The Ministry is not seeking absolute protection of the total area identified on this map. Rather, it is only within the high potential area that the program will focus its efforts and will encourage land uses (such as agriculture and forestry) which do not preclude the future opportunity of aggregate extraction.
Sand and gravel resource areas shown are generalized. Crushable stone resources occur within the area but have not been indicated as this information is not yet fully inventoried.

C: minerals and fossil fuels

1. OBJECTIVE

The objective for minerals and fossil fuels is to provide for a strengthening of the contribution of these resources to provincial economic development and energy production.

2. TARGETS

The target for mineral resources is to keep open as much land as possible for mineral exploration and development.

The target for oil and gas is to encourage as much exploration and production as possible to maximize their contribution to provincial energy needs.

3. DISCUSSION

Specific targets have not been developed for non-aggregate mineral or fossil fuel production at the district level because of difficulties in predicting market trends and assessing resource potentials and because actual production is primarily a responsibility of the private sector.

A compilation of the available date on mineral and petroleum resources in Owen Sound District was recently initiated. A preliminary summary and assessment of the information collected is presented.

There are no producing oil and gas fields in the district at present. One depleted gas field and one inactive gas field occur in the district (Figure 3). The Hepworth gas field, in Amabel Township, produced a total of 708 thousand cubic metres of gas. There has been no recent production; the field is considered to be depleted. The Egremont gas pool in Egremont Township was discovered in 1966. There is no record of production and no reserve figures have been calculated. Estimates of the district's known and potentially recoverable oil and gas reserves are not available as the resource is currently being inventoried and reassessed. Silurian, Ordovician and Cambrian bedrock formations underlying the district have good potential for oil and gas, both on land and under Lake Huron.

There is also some potential for production of oil from oil shales. The Collingwood shale is a potential oil shale that occurs in the subsurface throughout southwestern Ontario, including Owen Sound District. The unit is about 6 metres thick. Preliminary hydrocarbon analysis of samples of the Collingwood shale from near Craigleith on Georgian Bay and Little Current on Manitoulin Island have given values of up to 55 litres of oil per tonne. Similar values could be expected from the shales in the subsurface of Owen Sound District.

There are at least eight known occurrences of zinc sulfides in the Bruce Peninsula area in Owen Sound District. None of these occurrences have sufficient dimensions or grade to be classed as orebodies, and no estimates of reserves have been calculated. Silurian formations which occur in the subsurface beneath most of the district have good potential for zinc.

Peat, which may be used as a fuel, occurs in a number of deposits throughout the district. Salt occurs in the subsurface within Silurian bedrock formations underlying the southwestern corner of Kincardine Township. Gypsum may occur in Silurian formations which underlie most of the district.

4. STRATEGY

The principal guidelines of the Ministry of Natural Resources will be to establish and maintain an accurate data base on known mineral and petroleum resources in Owen Sound District and, to keep as much land as possible open for exploration and development through participation in the municipal land use planning process.

In relation to these guidelines the ministry plans to:

- identify, evaluate and inventory all known mineral and fossil fuel deposits;
- monitor mineral resources industry activity for purposes of encouraging development of

resources and suggesting new prospects and diversification of the mineral markets;
- provide for the exploration industry and public as much useful base data as possible;
- ensure that all information pertaining to a resource and its utilization be made available and discussed with all levels of government prior to any development;
- encourage the utilization or protection of known deposits and occurrences prior to long-term sterilization by conflicting land uses;
- encourage the development and use of new technologies for more efficient and safe extraction of mineral resources;
- ensure that all resource development and extraction takes place in conformity with existing and applicable government acts and regulations;
- identify and address all hazards related to past and present resource development activities;
- promote market research into industrial uses of by-products; and
- educate the public about the social and economic consequences of alternate land use policies affecting resource extraction.

A three year program to evaluate Ontario's known and potential oil and gas reserves started in December, 1982. The Ontario Geological Survey is currently assessing the oil shale potential of Owen Sound District as well as other districts within southwestern Ontario.

5. INTEGRATION

Exploration and development activities will be assessed for this effect on other ministry programs.

D: fisheries

1. OBJECTIVE

The objective for fisheries management in southern Ontario is to provide opportunities for recreation and economic benefits consistent with the maintenance of healthy fish communities.

More specific objectives are:
Sport Fishing
- to meet demand within the limits of a wisely managed and rehabilitated resource;

Commercial Fishing
- to maintain a viable industry;

Bait Fishing
- to maintain current production; and

Provincially Rare and Endangered Species
- to prevent the extinction of any native species

2. TARGETS

The targets for fisheries in Owen Sound District are:
Sport Fishing
- to provide 1,039,600 recreation opportunities annually by the year 2000.

Commercial Fishing
- to provide 714,800 kilograms (1,575,838 pounds) of fish annually by the year 2000.

Bait Fishing
- to provide 445,000 dozen of fish annually by the year 2000.

Provincially Rare and Endangered Species
- to ensure no native fish species become extinct.

3. DISCUSSION

a. Sport Fishing

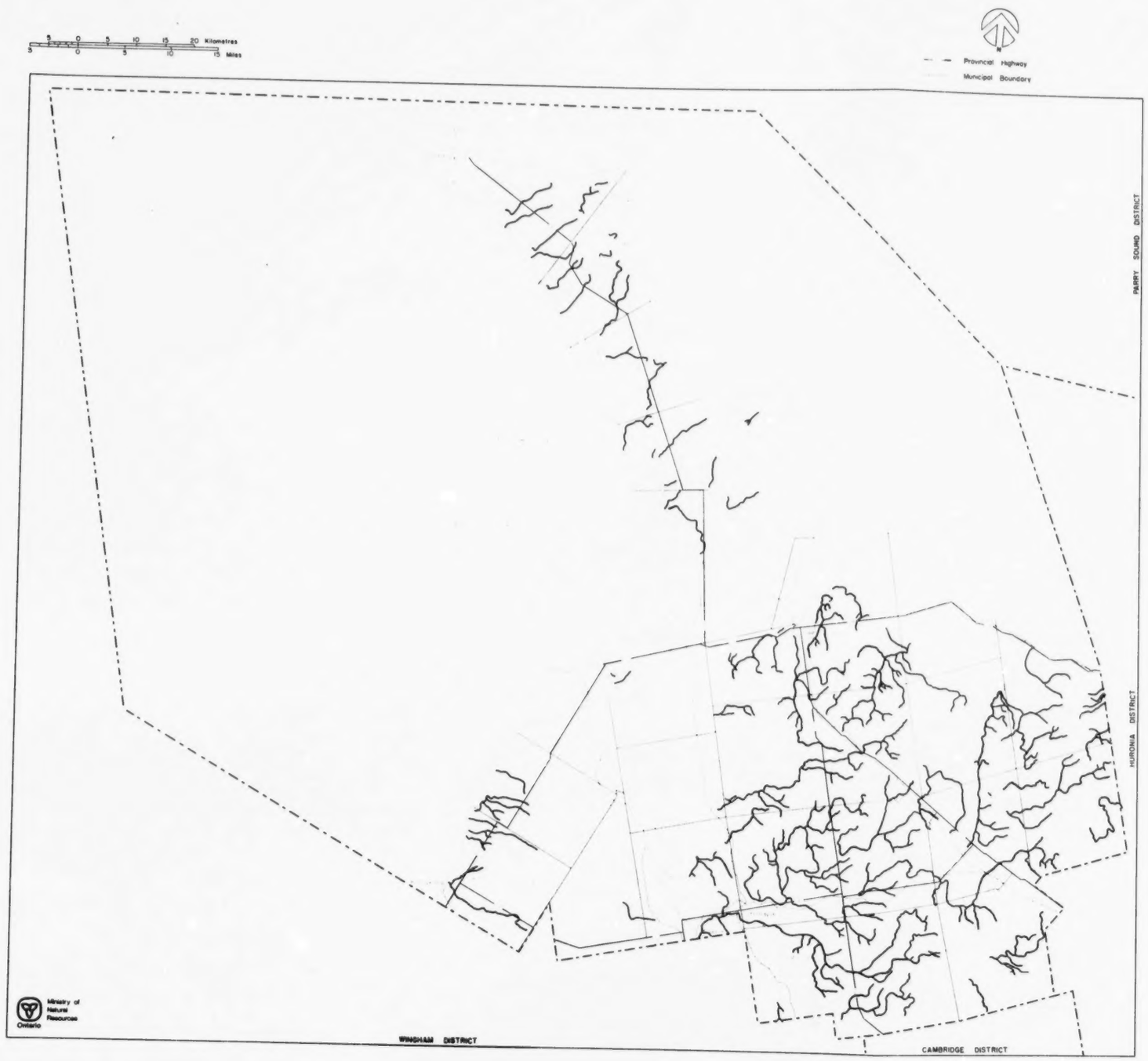
The current level of participation in sports fishing in the district is equivalent to 375,500 opportunities. This represents a harvest of about 138,700 kilograms of fish.

The popularity of sports fishing is increasing throughout the district. The gross potential number of opportunities that could be available is equivalent to the district's sport fishing target of 1,039,600 opportunities (which represents a possible harvest of 384,100 kilograms of fish).

Therefore, the target for sports fishing opportunities apparently is achievable if all species (both coldwater and warmwater) of fish are considered.

OWEN SOUND DISTRICT
FISHERIES PROGRAM

Figure 4



It is expected that ultimately the angler demand across southern Ontario for coldwater fish will exceed the capacity to produce. That situation currently exists in some areas. To mitigate this situation, coldwater fisheries resources have to be protected, and where necessary, rehabilitated.

To meet the sport fishing target, the district will institute a comprehensive and systematic fisheries management program on a fish community basis which emphasizes self-sustaining populations, strict protection of critical fisheries habitat and populations, and rehabilitation of degraded fisheries.

Until such time as this program is in place, and recognizing that land use activities have a significant impact on fisheries production, the following will be done towards the target achievement:

- ensure that fish populations are managed on a self-sustaining basis including improving habitat conditions for natural reproduction;
- protect critical coldwater sites (Figure 4);
- minimize the impact created by development projects on all water resources through liaison with other agencies, enforcement of fisheries and water related regulations, public education and extension programs;
- encourage municipalities to establish land use policies in their official plans which protect critical fisheries habitat occupied by warmwater and coldwater species;
- encourage conservation authorities to establish policies which protect critical fisheries habitat on authority properties;
- rehabilitate degraded fisheries habitat and those undergoing environmental stress to improve their capacity to produce fish and provide continuous recreational fishing;
- develop a comprehensive fisheries assessment program to monitor population and habitat conditions in lakes, streams and rivers;
- assemble a comprehensive inventory of significant fisheries resource areas, for example, spawning, rearing, feeder, nursery and viewing areas;
- enforce fisheries related acts and regulations to protect fisheries habitat, protect fish populations during spawning, migration and during other periods of concentration and to discourage fishing out-of-season, fishing in closed areas and fishing by means other than angling;
- encourage the continued availability of municipal, conservation authority, federal government and Crown lands for public fishing opportunities;
- provide artificial recreational fishing opportunities on small, self-contained water bodies including purchasing fish from the private sector and encouraging the "user-pays" concept; and
- encourage community organizations through community involvement projects to work on fisheries development and rehabilitation projects in cooperation with the ministry.

b. Commercial Fishing

The present production is 232,300 kilograms of fish while the potential and target is 714,800 kilograms. The target, which is based on a possible sustained yield, is sufficient to allow for the anticipated growth in the commercial fishing industry that present upward trends suggest.

Achievement of the target will be through the management of the commercial fish stocks of Georgian Bay and Lake Huron by regulating the harvest of commercial fish species and protecting the resource base.

The allocation of the allowable harvest of the fisheries resource among user groups will be based on an objective, careful examination of all relevant biological, social and economic factors to ensure that the optimum benefits accrue to the residents of Ontario. It is the responsibility of both anglers and commercial fishermen to participate in cooperative management and adhere to their catch limits, quotas and the regulations to protect the fish stocks and guarantee their perpetuation for the future.

To further protect the fisheries resources, the ministry is working with American jurisdictions to ensure that balanced harvests of fish stocks are assured and management strategies are compatible.

Management will include the following:

- define fish stocks, populations and stresses as a framework for a future quota management system and revised licence area system;
- work with the local commercial fishing associations in developing the quota management system to prevent over-harvesting of species and encourage fishing for several species as opposed to the present single species type of use;
- enforce commercial fishing-related acts and regulations to ensure adherence, proper and accurate reporting and quotas are not exceeded;
- to enable the industry to maintain economic viability, future entry into the commercial fishery may be limited;
- encourage municipalities to establish land use policies in their official plans to protect nearshore habitat essential to certain fish species during part of their life history;
- encourage cooperative management between

conservation authorities, the Ministry of Agriculture and Food, and the Ministry of the Environment to minimize the effect of deleterious stream and river effluents from degrading near-shore and offshore fish habitats;
- the ministry's intention is to rehabilitate the fish communities of the Great Lakes. Rehabilitation will result in an increase in the volume of more desirable fish species (whitefish, lake trout, deepwater cisco, etc.), but a decrease in the volume of less desirable species (gizzard shad, suckers, smelt, etc.); and
- the ministry's approach to fisheries management establishes long term targets based on sustainable yield. However, there may be short term fluctuations in the harvest in response to changing circumstances.

c. Bait Fish

The present production is 99,000 dozen (1,482 kilograms) of fish, while the potential and target is 445,000 dozen (6,660 kilograms).

Manage the commercial bait fish stocks of inland waters to maintain a viable fish industry by regulating the bait fish harvest. This will include:
- regulation of the harvest through licencing based on a zoning system to ensure stocks are not being over-exploited;
- carry out a study of the bait fish resources to determine the maximum annual allowable harvest per licence; and
- minimize conflicts with the sports fishery by assigning bait fish areas on a time and area basis.

d. Viewing

Promote the viewing of fish as an important recreation activity in conjunction with other fisheries management programs. This will include:
- identification and promotion of the viewing of fish at special and regulated sites during migratory spawning periods and other periods of concentration without affecting fish behaviour, survival or population levels; and
- encouraging the viewing of fish at fish hatcheries and at fishways.

4. STRATEGY

a. Sport Fishing

Of the sports fishing target of 1.03 million opportunities, only 18 percent will be realized from the inland waters. The nature of lake trout, rainbow trout and salmon fishing located along the mouths of major rivers and offshore results in heavy concentrations of anglers in these areas where angling capacity is high. In the smaller inland waters (Figure 4), the capacity for angling is considerably less and the ability of such areas to withstand heavy use is low.

b. Commercial Fishing

In order to achieve the target, increased harvesting of commercially desirable fish species will have to occur in Georgian Bay and Lake Huron (Figure 4).

The commercial harvest will not necessarily consist of a specific proportion of the sustainable yield of each fish species. In most instances, commercial fishermen will direct their efforts toward harvesting species that cannot be caught by angling or are not sought by fishermen, or stocks which are not accessible because they are found far out in the lakes.

c. Bait Fishing

The commercial bait fish will come from inland waters.

5. INTEGRATION

All fisheries management projects, stream diversions, dredging and fish collections will be covered by proper approvals or permits required by any other agency or individual.

Any water related project will not interfere with the water management objectives of the conservation authorities or the hazard land policies of any official plan.

E: wildlife

1. OBJECTIVE

The objective for wildlife management in southern Ontario is to provide opportunities for social and economic benefits of wildlife recreation and fur harvest consistent with the maintenance of healthy wildlife populations.

More specific objectives are:

Hunting

- to provide opportunities sufficient to maintain the present rate of participation and quality of hunting by residents; and
- to maintain the contribution to the economy of hunting by residents;

Trapping

- to sustain the maximum yield from wild furbearer populations while maintaining the present diversity of fur types; and

Other Uses

- to prevent additional species from becoming endangered or threatened;
- to improve the status of existing endangered or threatened species with the objective of removing them from the endangered species list;
- to maintain populations of all wildlife species (both non-game and game) at levels sufficient to:
  - provide opportunities for recreational enjoyment, aesthetic appreciation, scientific investigation, and educational uses;
  - provide benefits from tourism;
  - ensure environmental quality and ecosystem integrity; and
  - ensure the safety of the public

2. TARGETS

The targets for wildlife in Owen Sound District are:

Hunting

- to provide by the year 2000; 184,680 opportunities of hunting recreation per annum; including 35,000 opportunities of big game hunting; 120,690 opportunities of small game hunting and 28,990 opportunities of waterfowl hunting; and

Trapping

- to manage populations of wild furbearers such that an average harvest of 35,000 pelts can be achieved by the year 2000 while maintaining species diversity; and

Other Uses

- to ensure no wildlife species become extinct.

A target for wildlife viewing has not been included due to the difficulty of measuring this activity and of assessing the influence of management actions. Viewing targets will be defined through ongoing policy development and will be incorporated into the *Land Use Guidelines* at an appropriate opportunity.

3. DISCUSSION

a. Hunting

(i) Big game In 1980; 6,748 hunters experienced 30,543 recreational hunting occasions, or 87 percent of the target. The target is 35,000 opportunities while the potential is 42,900 opportunities.

The demand for big game hunting opportunities in Owen Sound District is increasing. Management efforts are being directed toward increasing the white-tailed deer herd.

Achievement of the target assumes the following actions will be taken with regard to white-tailed deer:

- manage white-tailed deer using a variety of deer harvest and habitat management techniques;
- establish deer population and deer harvest targets on a management unit basis;
- control deer harvest through the antlerless deer system and through any other harvest methods that will limit harvest yet provide adequate hunting opportunities;
- institute any other population management techniques designed to optimize deer numbers according to range capacity, land use and land tenure;
- enhance deer winter range through controlled burns and other forest management techniques

which provide long-term food production and protection of deer shelter areas;
- enhance deer summer range where required using such techniques as clear cuts, controlled burns and herbicides;
- protect critical winter range (deer yarding areas) by recognition in official plans, input to forest management plans, public education and by forest fire protection;
- carry out predator control measures as required to minimize predation by domestic dogs or wild predators during the critical winter period;
- enhance enforcement program to minimize the illegal deer harvest;
- encourage the continued availability of deer hunting opportunities on lands owned by conservation authorities, municipalities, the federal government and the Crown;
- encourage the continuation of hunting opportunities on private lands through liaison with municipalities, agricultural societies, sportsmen clubs, enforcement of trespassing on private properties and the hunter safety program;
- assess deer harvest, deer population and deer habitat on an ongoing basis; and
- encourage community organizations to become involved in deer habitat management programs.

Black bear hunting is expected to contribute to the target in a limited way. Management efforts will be directed towards the control of nuisance bears. To this end, the following will be done:
- educate private landowners, municipalities, resort operators and apiary operators as to the proper means of preventing black bear damage; and
- encourage black bear hunting in areas of high bear population to reduce bear numbers and nuisance bear incidences.

(ii) Small Game The current level of participation in hunting for small game is equivalent to 80,700 occasions, or 67 percent of the target. The potential is 151,900 opportunities, which is 31,210 opportunities greater than the target. The small game target is, however, based on the projected amount of participation by the year 2000 based on current upward trends.

In order to provide more recreational hunting opportunities, the following will be done:
- protect critical wildlife habitat such as shorelines and the escarpment from fragmentation due to development by input into municipal plans, zoning by-laws and severances;
- advise landowners of habitat management measures designed to maintain or enhance habitat required by particular wildlife species;
- encourage the maintenance of hunting opportunities for small game species on private lands through liaison with municipalities, agricultural societies, sportsmen clubs, enforcement of trespass laws and the hunter safety program;
- encourage the continued and future availability of small game hunting opportunities on lands owned by conservation authorities, municipalities, federal government and the Crown;
- carry out habitat management measures on ministry owned and managed properties in conjunction with other management projects to improve habitat for specific wildlife species; and
- encourage community involvement in small game habitat management programs.

(iii) Waterfowl The present number of recreational hunting occasions is 26,100 or 90.3 percent of the targeted use. The potential is 41,200 opportunities. The target for waterfowl hunting assumes an increasing demand with supply increasing to meet demand to the year 2000. It also assumes that the ministry will:
- protect and manage wetlands, lowlands and shorelines to ensure production of waterfowl and lowland species;
- protect key wetland areas which provide ecological benefits beyond their boundaries in conjunction with conservation authorities and by recommending the recognition of such areas in official plans;
- encourage private landowners to protect wetlands and lowlands on their property through a public education program; liaison with the Ministry of Agriculture and Food on drainage projects; and liaison with conservation authorities and other private conservation organizations in order to explain the social, economic and ecological values of wetlands;
- ensure the management of key waterfowl areas in conjunction with conservation authorities, Ducks Unlimited and community groups to improve waterfowl nesting, rearing, feeding and staging habitat;
- encourage the maintenance of waterfowl and other migratory bird hunting opportunities on private lands through liaison with municipalities, sportsmen clubs and the enforcement of trespass legislation;
- encourage the continued and future availability of waterfowl hunting opportunities on conservation authority management areas recognizing that certain strategic sanctuary zones are a useful method of waterfowl management; and
- assess waterfowl harvest, population and habitat in existing management areas.

OWEN SOUND DISTRICT

WILDLIFE PROGRAM

LEGEND

- Winter Deer Range
- Wetlands
- Waterfowl Habitat
- Wildlife Management Area
- ★ Resource Management Area - R

5 0 5 10 15 20 Kilometres

5 0 5 10 15 Miles

Ministry of Natural Resources
Ontario

WINDHAM DISTRICT

Figure 5

Provincial Highway
Municipal Boundary
PARRY SOUND DISTRICT
HURONIA DISTRICT
CAMBRIDGE DISTRICT

b. Trapping

The present harvest is 34,529 pelts which is 98.6 percent of the target. The potential is 40,000 pelts.

It is predicted that there will be no increases from the present levels of harvest to the year 2000.

Continuous achievement of the target requires the following actions be taken:

- regulate harvest and protect and manage key habitats;
- establish optimum trapper numbers and annual harvest targets of fur species on a management unit basis;
- regulate trapper numbers and trapping pressure to ensure the surplus of furbearers is harvested annually in order to minimize conflict with private landowners;
- ensure proper protection for those species of furbearers being reintroduced into the district, e.g. fisher, and those species not yet established, e.g. otter;
- promote the continued availability of all lands except provincial parks and conservation areas for trapping purposes;
- ensure that valuable forest land, other wildlife habitat, critical coldwater streams and agricultural land are protected from flooding by controlling nuisance beaver;
- educate trappers in trapping procedure, fur handling and humane trapping through a trapper education program;
- improve public attitudes toward trapping by enhancing enforcement of regulations, encouraging trappers to use humane methods and regulating or restricting trapping in certain areas;
- assess fur harvest, furbearer populations and habitat for management purposes; and
- coordinate efforts with the local trappers councils to develop the fur harvest program.

c. Other Uses

The ministry, in managing for other uses of wildlife, will:

- protect, conserve and manage all wildlife species (both non-game and game) on public and private lands, and ensure the perpetuation of diverse high quality habitats;
- identify endangered, threatened or rare species and significant populations of wildlife species (both non-game and game) and protect or manage these populations if the best available scientific, social and economic data indicate that such action is necessary to achieve the above objectives and targets;
- work cooperatively with government agencies at the federal, provincial and municipal levels, and with private landowners, developers and other members of the private sector to achieve the protection of all wildlife resources (both non-game and game);
- encourage greater non-government participation in the identification and management of wildlife, in particular endangered, threatened or rare species; and
- provide extension services which promote an understanding of the value of wildlife resources (both non-game and game), and non-consumptive uses, and which enhance social benefits and tourism.

Owen Sound District will promote the viewing of various wildlife species as an important recreational activity in conjunction with other wildlife management programs. This will include:

- identification and management of significant habitat such as travel corridors, wetlands and shorelines, which attract or concentrate wildlife in order to permit public viewing without affecting wildlife behaviour, survival or population levels;
- enhancement of a viewing program in provincial parks, wildlife management areas and on other Crown lands; and
- cooperative ventures with naturalists organizations and other interest groups will be investigated to provide viewing opportunities.

4. STRATEGY

a. Hunting

(i) Big game The ministry plans to achieve 43 percent of the target from the Bruce Peninsula, 22 percent from east Grey County, 21 percent from west Grey County and 14 percent from south Bruce County (Figure 5).

The ministry plans to attempt to achieve 71 percent of the target from private land.

(ii) Small game Areas of appropriate habitat supporting small game populations are found throughout the district and will contribute to the achievement of this target.

(iii) Waterfowl The ministry plans to achieve 45 percent of the target in the Bruce Peninsula, 25 percent in south Bruce County, 20 percent in east Grey County, while west Grey County will contribute an additional 25 percent (Figure 5).

The ministry plans to attempt to achieve 75 percent of the target from private land.

b. Trapping

Areas of appropriate habitat which support furbearers are found throughout the district and will contribute to the achievement of this target. Protect critical furbearer habitats (wetlands, lowlands, shorelines, streams).

5. INTEGRATION

Control measures will be implemented when nuisance beaver cause flooding of county and conservation authority forests and zones within provincial parks.

During forest management activities to improve deer habitat, every attempt will be made to have forestry by-products extracted for commercial use.

During controlled burn projects conducted for deer range management, consideration will be given to the protection of other significant resource areas and private property. Any timber of commercial quality will be extracted before such a burn.

Nuisance bears or other nuisance animals causing problems at provincial parks, the junior ranger camp and the fish hatchery will be removed.

Any water or wetland-related project will not interfere with the water management objectives of the conservation authority or the hazard lands policies of any official plan.

Management plans will be prepared for all important wildlife habitats.

F: provincial parks

1. OBJECTIVES

The objectives for the provincial parks system in southern Ontario are:

Protection

- to protect provincially significant elements of the natural and cultural landscape of Ontario;

Heritage Appreciation

- to provide opportunities for exploration and appreciation of the outdoor natural and cultural heritage of Ontario;

Recreation

- to provide provincial park outdoor recreation opportunities ranging from high intensity day use to low intensity wilderness experiences; and

Tourism

- to provide Ontario's residents and out-of-province visitors with opportunities to discover the experience the distinctive regions of the province.

2. TARGETS

The targets for the provincial parks system in Owen Sound District are:

Protection

- Earth science to protect provincially significant representative and special earth science features which contribute to the representation of the 35 geological environments of southern Ontario;
- Life science to protect provincially significant life science features which contribute to the representation of each vegetative site type in the 26 site districts in southern Ontario;
- Historical resources to protect provincially significant landscape-related prehistorical and historical resources which contribute to representation of the 14 themes of southern Ontario's history;

Heritage appreciation

- to provide opportunities for exploration and appreciation of the outdoor natural and cultural heritage; and

Recreation and tourism

- to provide annually, by the year 2000, the following recreation opportunities for residents and visitors to provincial parks in Owen Sound District:

Day Use	485,200 swimming opportunities
	262,800 picnicking opportunities
Extended Use	478,600 camping opportunities

3. DISCUSSION

a. Protection

In Owen Sound District, an assessment of all known earth or life science areas of natural and

scientific interest has been conducted to determine which are the most significant features relative to the protection targets. An assessment of historical resources has not been completed.

(i) Areas of natural and scientifc interest
These are areas of land and water containing natural landscapes or features which have been identified as having values related to protection, natural heritage appreciation, scientific study or education.

Areas of natural and scientific interest may vary in level of significance. The most significant may contribute to the achievement of the ministry's protection objective.

Where areas of natural and scientific interest occur on public lands managed by the ministry, it will ensure that the land uses and activities which occur, provide for the protection of identified values.

On private lands, the ministry will, through cooperation with others, attempt to ensure that landowners are aware of significant features on their properties and seek the owner's cooperation in protecting such features. The identification of areas of natural and scientific interest on private land does not indicate an intent of the ministry to acquire this land or to restrain or prevent any private use of land.

Areas of natural and scientific interest encourage the protection of additional areas not regulated as provincial parks and provide a focus for both the public and private sectors to contribute to the protection of Ontario's natural heritage.

(ii) Significant earth and life science features
The features listed in Table 3 (significant earth science features), Table 4 (significant life science features) and Table 5 (significant earth and life science features) are those which can best contribute to representation of the geological environments and vegetative site types of southern Ontario.

Twenty-six earth science, 41 life science and 13 combined earth and life science features have been identified. Six of these features are shared with the neighbouring districts of Wingham, Cambridge and Huronia. Table 2 below summarizes the pattern of ownership of these significant features.

TABLE 2 OWNERSHIP PATTERNS: SIGNIFICANT FEATURES

Ownership	Earth Science	Life Science	Both Earth and Life Science
In provincial parks (Crown)		1	
In park reserves (Crown)		1	1
Mostly Crown land	1	6	3
Federal land		1	3
Mixed ownership of Crown, conservation authority county or private	4	3	1
Mixed ownership of conservation authority, county or private	1	5	
Mixed ownership of conservation authority and private	3	11	2
Private land	17	13	3
TOTAL	26	41	13

The significant earth, life or earth and life features that occur on Crown land will be protected generally as either nature reserve zones within existing parks or by proposed parks to be approved as nature reserves. This applies to the Crown land portion only in the case of features under mixed ownership.

Conservation authorities, federal agencies, and Grey and Bruce Counties, will be consulted, and encouraged to recognize in their land management programs those sites that occur on their lands.

The total area of significant earth and life science features on land other than Crown land is sub-

TABLE 3 SIGNIFICANT EARTH SCIENCE FEATURES

LOCATION	FEATURE	CURRENT STATUS(1)
• Lion's Head Promontory	bedrock outcropping	Crown land portion recommended as nature reserve park; C, P
• Keldon Esker	esker	SaVCA, P
• Hopeville Drumlins	glacial features	SaVCA, P
• Egerton Esker	esker	SaVCA, P
• East Meaford Creek	bedrock features	GC, P
• Allan Park Ice—Marginal Delta	glacial feature	P
• Delphi Point	bedrock and fossil features	P
• Blue Mountain Area Moraines and Crevice Caves	escarpment and glacial features	P, C, GC, NGRCA
• Dobbinton Esker	glacial features	P
• Topcliffe Crevasse Fillings	glacial features	P
• Williscroft Moraine	glacial features	P
• Tara Moraine and Esker	glacial features	P
• Eugenia Lake Drumlins	glacial features	P
• Kolapore Uplands	bedrock and cave features	P, C, NGRCA, EC
• Wodehouse Creek Sink Holes and Karst	karst features	C, NGRCA, P
• Formosa North Road-Cut	bedrock features	P
• Saugeen Kame Terraces	glacial features	P
• Arkwright Drumlins	glacial features	P
• A Tara Moraine	glacial features	P
• Saugeen River Section	bedrock features	P
• Maryville Lakes	Algonquin bar, lower spits, dunes, drumlins	P
• Keldon Esker Northern Extension	esker	P
• Allan Park Crevasse Fillings	glacial features	P
• Barney Lake—Payette Nipissing Shoreline	ice contact deposits	P
• Beaver Valley	river floodplain environment	P, C, NGRCA
• St. Edmunds Cave System	karst features	P

(1) SVCA—Sauble Valley Conservation Authority
NGRCA—North Grey Region Conservation Authority
SaVCA—Saugeen Valley Conservation Authority
GC—Grey County
BC—Bruce County
F—Federal
C—Crown
P—Private

stantial. Obviously, the purchase by the Crown of these areas would be neither practical nor acceptable. However, in most cases, it is not necessary for these areas to be devoted exclusively to protection and heritage appreciation within the provincial parks system to meet provincial park objectives. Therefore, in Owen Sound District, strategies which will encourage the protection of these sites without undue infringement on existing land uses and property rights will be foremost. It is also expected that the list of significant earth and life science features, and

the extent of the areas delineated as being required to protect the earth and life science features in question, will be refined over time.

(iii) Historical Resources In Owen Sound District, eight of the 14 historical themes are represented in part within existing provincial parks.

Historical themes are groupings of historical activities of similar natures and times. They are usually represented by sites where specific relics are found or where known historical events occurred.

These include archaeological sites in Fathom Five, Cyprus Lake and Inverhuron Provincial Parks and sites of known historical activity in Craigleith, Cyprus Lake, Fathom Five, Inverhuron, Sauble Falls Provincial Parks.

b. Heritage Appreciation

The target for heritage appreciation is achieved by providing opportunities for unstructured exploration and appreciation of features of Ontario's natural and cultural landscapes, and its earth and life science features. Such opportunities are best provided in large areas wherein representative samples of Ontario's variety of natural and cultural landscapes may be found.

Presently, there are six provincial parks in Owen Sound District that contribute to this target. This occurs through visitor services programming which offers a variety of communications, interpretation, recreation and outdoor education messages, activities and facilities relating to the features within each park.

The heritage appreciation opportunities presently provided by the ministry in Owen Sound District do not fully provide for the exploration and appreciation of the natural and cultural landscape of this area of Ontario. Other agencies, conservation authority and private parks, municipal and other museums, and areas of natural and scientific interest complement the ministry's heritage appreciation objective and target.

c. Recreation and Tourism

The recreation targets represent only the ministry's share of the overall anticipated demand. Municipalities, conservation authorities, other agencies and the private sector are assumed to at least maintain their present proportion of the total supply.

Camping, picnicking and swimming have been selected as indicator types. Other activities such as trails will be developed in association with them.

There are six provincial parks in regulation within the Owen Sound District. They are MacGregor Point, Sauble Falls, Craigleith, Cyprus Lake, Fathom Five and Inverhuron. These facilities will be maintained and presently provide 927 campsites, 987 picnic tables and 2,489 metres of beach (Table 6).

Within the Owen Sound District, provincial parks provide 11.3 percent of the total number of campsites, 32 percent of the picnic tables and 3.1 percent of the swimming opportunities measured in metres of beach.

The anticipated additional picnic and camping sites required to meet recreation targets by the year 2000 will necessitate expansion within some existing parks and the creation of two new parks, Pretty River and Black Creek (Figure 6). Master planning will further refine the targets.

d. Provincial Parks

In Owen Sound District, the six existing provincial parks contribute to various provincial park targets:

Craigleith —contributes to achieving the targets for:
- protection of a historical resource
- heritage appreciation
- recreation

Cyprus Lake —contributes to achieving all of the targets

Fathom Five —contributes to achieving all of the targets

Inverhuron —contributes to achieving the targets for:
- protection of a historical resource
- recreation (day use only)

MacGregor Point —contributes to achieving the targets for:
- heritage appreciation
- recreation

Sauble Falls —contributes to achieving the targets for:
- heritage appreciation
- recreation

No one park can be all things to all people. Accordingly, to provide a diversity of heritage appreciation and recreation experiences, different park environments are required. Distinctive experiences and park environments are provided through six classes of parks: waterway, wilderness,

TABLE 4 SIGNIFICANT LIFE SCIENCE FEATURES

LOCATION	FEATURE	CURRENT STATUS[1]
• Cameron Lake Dunes; partly in Cyprus Lake Provincial Park	sand dune vegetation complex	proposed nature reserve zone within existing provincial park
• Black Creek Swamp; Black Creek Park Reserve	beaver pond wetland complex	proposed nature reserve zone within proposed park
• Smoky Head—White Bluff	Georgian Bay shoreline habitats	Crown land portion recommended as nature reserve park; C, P
• Ira Lake	wetland communities	Crown land portion recommended as nature reserve park; C, BC, P
• Johnston Harbour—Pine Tree Point	rock pavement vegetation complex	Crown land portion recommended as nature reserve park; C, P
• Duncan Crevice Caves	crevice cave vegetation complex	recommended as nature reserve park; C
• Bayview Escarpment	upland and swamp forests	Crown land portion recommended as nature reserve park; C, P
• McGill Lake	forested drumlins and wetlands	P, NGRCA, GC
• Upper Beaver Valley	forested re-entrant valley	P, NGRCA, C
• Kimberly Creek	escarpment vegetation complex	P, NGRCA
• Robson Lakes	forested moraine area	NGRCA, SaVCA, P
• Walter's Creek	cedar swamp and wet forest complex	P, NGRCA
• Sucker Creek	slope and valley bottom forest	SVCA, P
• Sauble Falls North	beach ridge and swale vegetation complex	SVCA, P, C, BC
• Kemble Forest	upland forest and wetlands	SVCA, P
• Shouldice Forest	floating fen and coniferous swamp forest	SVCA, GC, P
• Beaverdale Fen	forested drumlins and open fen	SaVCA, P
• Greenock Swamp	wetland and significant wildlife habitat	SaVCA, P
• Scott Point	shoreline and backshore vegetation complex	SaVCA, P
• Lily Oak Forest	forested glacial features	SaVCA, GC, P
• Bruce County Forest; Miller Lake Tract	Lake Huron and peninsula vegetation complex	BC, C, P
• Mountain Lake Fen	wetland and fen complex	P, GC
• Rocky Saugeen River	river valley vegetation complex	BC, P, SaVCA
• Traverston Creek	upland forest on kame moraine	P, GC
• Fishing Islands	significant fish and wildlife habitat	P, SVCA
• Cemetary Bog	swamp and fen complex	P

TABLE 4 SIGNIFICANT LIFE SCIENCE FEATURES (continued)

LOCATION	FEATURE	CURRENT STATUS[1]
• Duncan Lake South	upland forest	P
• Zinkan Island Cove	Lake Huron shoreline vegetation communities	P
• Dorcas Bay	shoreline and dune complex	P
• Skipness Drumlins and Wetlands	forested drumlins and wetlands	P
• Glamis Bog	bog and kettle kame association	P, SaVCA
• Howdenvale Bay	wet sand plain and fen	P
• Lyal Island	Lake Huron shoreline association	P
• Barrier Island	herring gull colony	P
• Tobermory Bog	bog associations	P
• Cape Hurd—Baptist Harbour	Lake Huron shoreline association	P
• Corisande Bay	wetland and forest associations	P
• Kinghurst West	forested glacial features	P
• Kinghurst Forest	upland forest on till moraine	P, SaVCA
• Harrison Lake and Fen	open fen on till moraine	P
• Cove Island	Lake Huron shoreline habitats	F

(1) SVCA—Sauble Valley Conservation Authority
NGRCA—North Grey Region Conservation Authority
SaVCA—Saugeen Valley Conservation Authority
BC—Bruce County
F—Federal
C—Crown
P—Private

TABLE 5 SIGNIFICANT EARTH AND LIFE SCIENCE FEATURES

LOCATION	FEATURE	CURRENT STATUS(1)
• Little Cove—Cave Point; partly in Cyprus Lake Provincial Park	Georgian Bay shoreline and escarpment complex —raised beaches, karst features	Crown land portion recommended as nature reserve park; C, BC, P
• Cabot Head—Inland Lakes (1) Willow Creek Headwaters (2) Crane River Headwaters (Umbrella Lake) (3) Cabot Head	escarpment vegetation complex —bedrock and fossil features For ease of feature analysis Cabot Head was divided into these three sections	Crown land portion recommended as nature reserve park; C, P
• Pretty River Valley West; part of PRV Park Reserve	escarpment vegetation complex —Niagara Escarpment features	Crown land portion is a proposed nature reserve zone within proposed park; C, GC, P
• Hope Bay forest	upland forest and escarpment features	Crown land portion recommended as nature reserve park; C, P
• Flower Pot Island	wave cut features	F
• Bear's Rump Island	wave cut features	F
• Skinner Bluff	escarpment vegetation complex	SVCA, P
• Slough of Despond	wetland and escarpment complex	SVCA, P
• South Saugeen River (Drew Area)	river valley and moraine complex	P
• Pretty River Valley Southeast	cliff and ravine vegetation	P
• Sucker Creek Valley—Cape Rich	escarpment complex glacial and post-glacial features	F
• Hatherton Wetlands (Esker site)	headwater wetlands and forested esker	C, NGRCA, SaVCA, GC, P
• Cape Croker Area	glacial features and raised shoreline	P

(1) SVCA—Sauble Valley Conservation Authority
NGRCA—North Grey Region Conservation Authority
SaVCA—Saugeen Valley Conservation Authority
GC—Grey County
BC—Bruce County
F—Federal
C—Crown
P—Private

TABLE 6 SUMMARY OF PROVINCIAL PARK OPPORTUNITIES*

	DAY USE				CAMPING	
	Opportunities		Facilities		Opportunities	Facilities
	Picnicking	Swimming	Picnic Tables	Metres of Beach		Campsites
Total Target (2000)	262,000	485,200	1,065	2,390	478,600	2,054
Existing Opportunities (1982)	242,800	505,300	987	2,489	216,000	927
New Opportunities Required by 2000	19,200	0	78	0	262,600	1,127
Available Potentials						
• in existing parks	4,900	0	20	0	79,200	340
• in candidate parks	14,300	0	58	0	144,500	620
TOTAL POTENTIAL	19,200	0	78	0	223,700	960
Target Variance	0	+20,100	0	+99	38,900	167

**Opportunities rounded to nearest 100*

OWEN SOUND DISTRICT

PROVINCIAL PARKS PROGRAM

Figure 6

nature reserve, historical, natural environment and recreation parks. It follows therefore that these park classes are intended to be the means through which park objectives and targets are implemented throughout Ontario's provincial park system.

4. STRATEGY

In order to implement the provincial parks targets, the ministry plans to:

a. Protection

- The owners of significant earth and life science features will be advised of the extent and significance of the earth or life science features on their properties.
- The ministry will work with owners of significant earth and life science features to encourage and assist them in protecting and caring for the features on their properties.
- Where it is felt necessary by the ministry, a more detailed study of a feature may be conducted where it is anticipated that protection of the feature might be a land use or planning concern.
- For areas of natural and scientific interest, the ministry will encourage investigations to identify and study them, and will foster an exchange of information about areas of natural and scientific interest with municipalities and conservation authorities, and upon request, with individuals or interested parties.

Forty-six percent of the earth science features of provincial significance are found in east Grey County with an additional 37 percent found on the Bruce Peninsula (Figure 6).

Sixty-seven percent of the features are in private ownership with the remaining 33 percent in some form of public ownership.

Fifty-two percent of the life science features of provincial significance are found on the Bruce Peninsula. The remaining features are almost evenly divided among east Grey, west Grey and south Bruce Counties.

Fifty-seven percent of the features are in private ownership while the remaining 43 percent is in some form of public ownership.

b. Heritage Appreciation

- The ministry will continue to provide heritage appreciation opportunities through visitor services programming consisting of communications, interpretation, recreation and outdoor education messages, activities and facilities at Craigleith, Cyprus Lake, Fathom Five, MacGregor Point and Sauble Falls. Programming at Inverhuron will be limited to resource management communications messages.
- The ministry will encourage public appreciation of the significant earth and life science features by:
  - developing interpretive material on the district's system of significant earth and life science features, which will include information on the ownership of and public access rights to each feature so as to discourage unwanted intrusions on private property by those interested in the earth and life science features of the district;
  - where appropriate, attempting to secure access for public appreciation of specific features in cooperation with landowners;
  - where appropriate, erecting plaques or developing other facilities for interpretation of specific features in cooperation with landowners; and
  - where appropriate, encouraging scientific and educational uses of specific features in cooperation with landowners.

c. Recreation and Tourism

The existing provincial parks in Owen Sound District will continue to contribute to the achievement and provision of recreational opportunities.

Additional day use picnic tables will be located as follows: Sauble Falls 10, Craigleith 10, Pretty River 20, Black Creek 38 (Figure 6).

Additional camping sites will be distributed as follows: Sauble Falls 150, Craigleith 170, MacGregor Point 20, Pretty River 350, Black Creek 270 (Figure 6). The balance of the target will be met in one or more additional areas as yet undesignated.

d. Provincial Parks

The ministry will continue the operation of the following parks:

- as natural environment parks:
  Cyprus Lake
  Fathom Five
  Inverhuron
  MacGregor Point
- as recreation parks:
  Craigleith
  Sauble Falls

The Crown land portions of the following significant features may, through time, be placed in regulation as nature reserve class provincial parks:

Lion's Head Promontory
Smokey Head—White Bluff
Ira Lake
Johnston Harbour—Pine Tree Point
Duncan Crevice Caves
Bayview Escarpment
Little Cove to Cave Point
Cabot Head
Hope Bay Forest

The ministry will permit interim use of these candidate nature reserve parks in accordance with the general integrated resources management policies in Section III A. Currently existing secondary uses such as hunting, trapping and passive recreation will continue as and when these areas are designated as provincial nature reserve parks.

Black Creek and Pretty River Valley, both presently park reserves, may, through time, be designated as natural environment provincial parks to contribute further to the achievement of the heritage appreciation and recreation targets. The general integrated resources management policies regarding interim use (Section III A) will apply in the meantime.

5. INTEGRATION

Resource extraction activities (pits, quarries, timber harvest) will be encouraged to locate in areas other than earth and life science features of provincial significance.

Mineral resource extraction in earth science features of provincial significance will be undertaken with primary consideration being given to the protection of the earth science features.

Trails and trail activities will be permitted within earth and life science features of provincial significance with primary consideration being given to the protection of the natural features.

Areas presently under forest management containing any or part of an earth or life science feature will be managed with primary consideration being given to the protection of the natural features.

Forest management activities on private lands within significant earth or life science features will give consideration to the protection of the natural values.

Fisheries and wildlife management activities occurring in or affecting a significant earth or life science feature on private, authority, county or Crown lands will recognize the natural features in those management activities.

Park master plans will consider the identification and management of deer yards and other areas for production of wildlife and fisheries resources.

The provision of fish, wildlife and plant viewing opportunities within park reserves and provincial parks will be promoted. Cooperative ventures with naturalist organizations and other interest groups will be investigated to provide plant viewing opportunities.

G: general recreation

1. OBJECTIVE

The ministry's recreation management efforts are directed primarily to hunting, fishing and provincial parks. There are a number of other activities which the ministry carries out for which no objectives have been developed.

Tentative objectives for general recreation are:

- to provide and to encourage a wide variety of outdoor recreation opportunities ranging from day use to back-country experiences;
- to identify, select and protect provincially significant natural and cultural resources; and

- to provide an economic contribution through tourism.

2. TARGET

No target has been assigned.

3. DISCUSSION

The Georgian Bay and Lake Huron shoreline and inland lakes and rivers in Owen Sound District are important recreation and tourism resources. Recreation and tourism provide an important, although in many cases seasonal, contribution to the local economy.

It is part of the ministry's objective to provide on Crown land and encourage on private land, a continuous contribution to the economy from tourism and its related industries.

The ministry can directly contribute to the achievement of general recreation objectives by providing trails and other recreation facilities on agreement forest lands, wildlife management areas and other Crown lands.

Numerous groups and agencies also contribute to the achievement of these objectives by developing trails and other recreational facilities, and protecting significant natural and cultural resources.

The ministry will assist groups and agencies through the granting of permission to develop recreational trails on appropriate public lands. The ministry will also maintain contact with local trail clubs, and will provide advice on the development and management of facilities by these and other suppliers of general recreation.

There are presently three provincially designated canoe routes totalling 130 kilometres within the Owen Sound District. Currently, they are maintained in conjunction with the appropriate conservation authority as follows:

- the Saugeen river canoe route from Hanover to Southampton will be promoted by this ministry and the Saugeen Valley Conservation Authority.
- the Rankin river canoe route, managed in conjunction with the Sauble Valley Conservation Authority, extends 18 kilometres from Sky Lake to Sauble Falls.
- a 20 kilometre canoe route from Kimberley to Heathcote along the Beaver river is managed in conjunction with the North Grey Region Conservation Authority.

There are 12 access points currently managed by the ministry within the Owen Sound District.

Approximately 345 kilometres of the Bruce Trail is within the district.

Private snowmobile clubs manage approximately 2,450 kilometres of trail within the district.

Across the district, cross-country ski trails are becoming increasingly popular and include approximately 300 kilometres of trail at the present time.

4. STRATEGY

The ministry will continue to maintain, in conjunction with the appropriate conservation authorities, the provincially designated canoe routes.

Within the framework of the recreational areas program, the district proposes to encourage private clubs and associations to establish a system of trunk trails both for cross-country skiing, snowmobiling, hiking and horseback riding.

The ministry proposes to encourage local municipalities and conservation authorities to manage access points where appropriate.

5. INTEGRATION

Prior to a trail being established, fisheries, wildlife and timber values will be considered to ensure no activities detrimental to these programs occur.

Until master plans have been completed for park reserves, no further trail development will be considered.

Trails and trail activities within earth and life science features shall not be detrimental to the natural values of the site.

Development of new access points shall not be detrimental to other ministry program objectives.

H: land administration

1. OBJECTIVE

The objective is to facilitate the orderly development and conservation of Ontario's land and water resources.

2. TARGET

Specific land administration targets have not been developed.

3. STRATEGY

To achieve the objective, the ministry plans to:

- to maintain the Crown's proprietary interest in land;
- to maintain up-to-date records of land grants and dispositions;
- manage Crown lands according to approved plans;
- dispose Crown land in accordance with the policies and designations of land use in approved Official Plans;
- regulate under the *Public Lands Act* the dumping of fill and other materials and the construction of docks, marinas or other facilities on Crown land;
- regulate under the *Beach Protection Act* the removal of earth materials from the bed, bank, beach or shore of lakes and streams; and
- regulate under the *Lakes and Rivers Improvement Act* the construction of dams, ponds or other alterations where these works affect or interfere with stream flow.

1. MEANS OF APPLICATION

Owen Sound District plans to employ either one or a combination of the following means to achieve the direction set out in the *Land Use Guidelines:*

- the preparation and approval of resource management plans;
- cooperate with municipalities on planning matters;
- through specific conditions incorporated in permits, licences, leases, easements, etc., issued under the authority of various Provincial Acts, e.g. the *Public Lands Act*, the *Mining Act*, the *Crown Timber Act*, etc.;
- liaison and cooperation with other government ministries and agencies, such as the Ministries of Transportation and Communication, Environment, Tourism and Recreation, Northern Affairs, Municipal Affairs and Housing, Agriculture and Food and the conservation authorities; and
- education and extension programs with private landowners, municipalities and interest groups.

2. INTERNAL INTEGRATION

Achievement of the targets outlined in this report are achievable so long as there is considerable program integration within the ministry.

Within the district, the Ministry of Natural Resources owns 18,146 hectares or 2.4 percent of the total land base. This Crown land measurement does not include lands under water. On these lands, the application of the *Land Use Guidelines* will take the form of park master plans and integrated resource management plans. Permitted activities are outlined in Table 7.

3. EXTERNAL INTEGRATION/ COORDINATION

a. Status of the Guidelines

The *Land Use Guidelines* have no legal status. The control of land use on private land in municipalities is exercised by those municipalities under the authority of the *Planning Act* which is administered by the Ministry of Municipal Affairs and Housing.

The ministry recognizes that private landowners, other government agencies, municipalities, conservation authorities and interest groups are key partners in any effort to achieve effective and integrated resource management. The Ministry of Natural Resources will continue to work with these groups, especially with municipalities through the ministry's plan input and review program to ensure that resource values are considered in local planning documents.

b. Private Lands

As the majority of the Owen Sound District is private land, many of the ministry's objectives and targets must be achieved on these lands. It is of primary importance that the ministry work closely with private landowners to help achieve optimum use of their natural resources. The ministry has many programs designed to do this. The forestry program provides advisory assistance and management agreements for private landowners. The mineral resources program provides information on aggregate potential and pit and quarry licencing procedures. The fish and wildlife program provides advice on habitat management and improvement such as for streams, ponds, marshes, and other wildlife habitat. The parks program is currently investigating owner agreements for the protection of earth and life science features.

c. Municipalities

The *Owen Sound District Land Use Guidelines* may serve as one of the sources of information for ministry involvement in municipal planning.

Review and input to municipal official plans is recognized as an essential mechanism for implementing ministry program objectives. In order that ministry objectives might be understood and program interests considered in the municipal planning process, good communications and cooperative relations with municipalities and planning boards are essential.

TABLE 7: GUIDELINES FOR CROWN LAND

Name	Location	Size hectares	Size acres	Management Priority	Secondary Use
Little Cove	St. Edmunds Twp (south of Dunk's Bay)	16	39	Recommended nature reserve park[1]	Bruce Trail hunting trapping
St. Edmunds Wildlife Management Area North	St. Edmunds Twp (south of Dorcas Bay)	927	2,091	Integrated resource management — deeryard — coldwater restricted area	hunting trapping passive recreation
St. Edmunds Wildlife Management Area South	St. Edmunds Twp (Johnson's Harbour — Pine Tree Point)	2,170	5,363	Recommended nature reserve park[1]	hunting trapping passive recreation
Cabot Head	St. Edmunds Twp (Emmett Lake)	4,642	11,471	Recommended nature reserve park[1]	low intensive recreation — hunting and trapping — access point — Junior Ranger camp
Lindsay Management Area	Lindsay Twp (Central Lindsay Twp)	364	900	Integrated resource management — deer management — agriculture — wildlife management	hunting trapping passive recreation
Smokey Head White Bluff	Lindsay Twp	520	1,285	Recommended nature reserve park[1]	hunting trapping passive recreation
Ira Lake	Lindsay Twp	112	278	Recommended nature reserve park[1]	hunting trapping passive recreation
Black Creek	Eastnor Twp (Stokes Bay)	285	704	Proposed natural environment park[1]	hunting trapping
Lion's Head	Eastnor Twp	538	1,330	Recommended nature reserve park[1]	forestry hunting trapping passive recreation
Hope Bay Forest	Eastnor Twp	517	1,277	Recommended nature reserve park[1]	hunting trapping passive recreation
Judge's Creek	Eastnor Twp	81	200	Wildlife management	passive recreation
Colpoys Bluffs	Albemarle Twp	212	523	Bruce Trail	hunting trapping
Rankin Property	Albemarle Twp (Isaac Lake)	448	1,107	District Fire Centre Integrated resource management — waterfowl — farming — fish and wildlife	hunting trapping passive recreation
Ranking Property South	Amabel Twp	545	1,347	Integrated resource management — forestry — recreation (passive and intensive) — wildlife management	hunting trapping
Bayview Escarpment	St. Vincent Twp (north-east of Woodford)	454	1,122	Recommended nature reserve park[1]	hunting trapping passive recreation
Beaver Valley Lowlands	Euphrasia Twp	540	1,334	Wildlife management	hunting trapping passive recreation

TABLE 7: GUIDELINES FOR CROWN LAND (continued)

Name	Location	Size hectares	Size acres	Management Priority	Secondary Use
Beaver Valley Ski Area	Euphrasia Twp	314	775	Integrated resource management — life science features — forestry — recreation — Bruce Trail	hunting trapping
Hoggs Falls	Artemesia Twp (northeast of Flesherton)	83	204	Integrated resource area — deeryard — coldwater restricted area — forestry — life science features — recreation	hunting trapping
Kolapore Uplands	Collingwood Twp (central Collingwood Twp)	1,986	4,907	Integrated resource area — forestry — wildlife management — recreation — earth science feature	hunting trapping
Pretty River Valley	Collingwood Twp (east of Gibraltar)	913	2,255	Proposed natural environment park(1) — earth and life science features	Bruce Trail snowmobiling forestry hunting trapping
Duncan Crevice Caves	Collingwood Twp	8	20	Recommended nature reserve park(1) — life science feature	hunting trapping

(1) The ministry will permit interim uses of candidate parks providing park values are protected. See Section III A. Integrated Resources Management.

Generally, the following program objectives will be negotiated for inclusion into official plans:

- hazard land mapping and policies which restrict development within flood prone areas. Municipalities shall be encouraged to undertake flood and fill mapping in conjunction with the conservation authorities;
- forestry policies which recognize the value of the resource and encourage sound forest management to sustain the existing forest industry;
- wildlife policies which recognize the economic and recreation importance of small and big game hunting and protect critical wildlife habitats;
- natural area policies which recognize the importance of protecting life science and earth science heritage for the economic, tourism and scientific benefits which they provide;
- fisheries policies which recognize the economic and tourism values of cold and warmwater fisheries and seek to protect critical fisheries habitat;
- mineral aggregate policies and designations which identify existing licenced areas appropriately and which permit future needs to be met;
- provision for access to shoreline for outdoor recreational pursuits shall be encouraged within official plans; and
- wetlands policies which recognize the economic, ecological and social benefits of these resource areas and ensure that all their benefits are considered in land use decisions.

There will be occasions when the ministry feels that certain land uses or proposed developments on private land, while in conformity with municipal planning documents, may have a negative impact on ministry programs or interests such as critical winter deer yards. In such situations the ministry will attempt to resolve the situation through discussions with the proponent, the municipality and the Ministry of Municipal Affairs and Housing.

In municipalities containing Crown land there may be situations where municipal planning documents do not permit land uses on Crown land indicated as acceptable in this document. Where this happens, and it appears that a possible land use conflict might arise, the ministry may consider taking further action under the procedures provided by the *Planning Act*.

Where the ministry receives a request for the disposition of Crown resources for a use which is in accordance with the *Land Use Guidelines*, but land use is not recognized on Crown land in the municipality's official plan or zoning by-law, the ministry will request input from the municipality.

County forest lands under agreement with the Ministry of Natural Resources occupy 8,977 hectares or 1.1 percent of the district land base. These lands contribute greatly to the forestry target. In negotiations with the municipalities, the Owen Sound District will encourage protection of life and earth science natural areas as well as the provision of hunting, fishing, trapping and trail recreation opportunities.

d. Conservation Authorities

Conservation authorities are independent corporate agencies set up jointly, under the *Conservation Authorities Act*, by the local municipalities and the Province of Ontario to develop and implement water related land management programs. This *Act* is administered on behalf of the Province of Ontario by the Ministry of Natural Resources.

The primary role of conservation authorities is in watershed management. The other programs of the authorities are supportive of this role and include: outdoor recreation, resource production, and information and education. Consequently, conservation authorities play a significant local role in the delivery of services and natural resources programs to the public. Conservation authorities throughout Ontario are currently initiating a watershed management planning program. Each authority will outline objectives and strategies with respect to resources management within their watershed. Conservation authority and ministry staff will coordinate their planning efforts to ensure that both plans are compatible and complementary.

Conservation authorities own 17,144 hectares or 2.2 percent of the district land base. Of this, approximately 50 percent is under forest management agreement with the ministry. Through cooperative exchange of information and policies, the Ministry of Natural Resources and conservation authorities will reflect mutual concerns in respective planning documents. With respect to *Owen Sound District Land Use Guidelines*, the conservation authorities could contribute to the ministry objectives and targets generally as follows.

Forestry

Through the agreement forest program and management of existing hardwood stands on other conservation authority lands, contribute to district timber target. Encourage forest planting on private land on areas less than four hectares for wood production, erosion control, fisheries, wildlife or aesthetic purposes.

Fisheries
Protection of critical coldwater areas and management of these areas as required.

Deer Yards
Protection of deer-yarding areas and management of these areas as required.

Trapping
Provision of trapping opportunities in areas other than conservation recreation areas.

Earth and Life Science Features
Assist with investigation to delineate specific boundaries of life science and earth science areas. Encourage recognition of earth and life science features.

Hazard Lands
Recognize and promote hazard land designations and flood and fill regulations within municipalities in conjunction with the Owen Sound District office.

Recreation
The provision of hunting opportunities in areas other than conservation recreation areas. Maintenance and provision of access for fishing opportunities. Provision of recreational trails, e.g. cross-country, snowmobile and hiking. Provision of day use access sites for viewing, beach and boating activities.

e. Niagara Escarpment Commission
The Niagara Escarpment Commission is preparing a plan for the designated portion of the Niagara Escarpment. The Ministry of Natural Resources has made considerable input to the Commission and there has been good cooperation between the two agencies. While the Niagara Escarpment plan is being finalized by the Ontario Government, the ministry will not undertake any actions that would compromise the intent of the proposed plan. Once the plan is approved, the ministry will ensure that its programs are carried out in conformity with the plan.

f. Ministry of Agriculture and Food
The ministry recognizes the importance of agriculture. On private land, the ministry normally will not encourage or support activities or land uses which result in a long-term loss of the amount of land in agricultural production. The ministry will encourage forestry, recreation and other compatible uses on high capability land presently not in agricultural production.

Generally, on public land the ministry will maintain high capability agricultural land, or other sites as identified by the Ministry of Agriculture and Food, in uses which do not preclude the long-term use of these lands for agriculture.

g. Ministry of the Environment
The Ministry of Natural Resources will work closely with the Ministry of the Environment in monitoring impacts on the environment related to natural resources.

The two ministries have jointly developed guidelines, in this regard, related to water quality and fisheries issues.

The Ministry of Natural Resources has responsibility for identifying the fisheries values of water bodies with respect to meeting its mandate. This identification is based on the *Land Use Guidelines* and, as developed, local fisheries management plans. The Ministry of the Environment is responsible for determining existing water quality and predicting the effects of proposed development on water quality. The latter information is used by the two ministries to assess potential effects on fisheries values.

h. Federal Government
Federal land within the district totals 8,670 hectares or 1.15 percent of the land base. This land is primarily within the Meaford tank range (under the jurisdiction of the Department of National Defence) and the Georgian Bay Islands managed by Parks Canada.

The Owen Sound District, in conjunction with these federal departments plans to encourage:
- the protection of earth and life science features on both sites; and
- management of the deer population on the Meaford tank range to supply recreation opportunities on adjacent lands.

If the proposed federal park for the Bruce Peninsula is approved, this document will be revised accordingly.

i. Indian Bands
Indian lands encompass 12,080 hectares or 1.6 percent of the district land base. The ministry will work in conjunction with the Indian bands to encourage protection of life science and earth science features, deer yards and fish habitat and in the provision of resource products.

j. Other Government Agencies and Crown Corporations
The *Land Use Guidelines* will provide the basis for policy direction and program guidance for the district. The document will also provide the means for incorporating and coordinating the interests of other agencies with ministry programs, for example, the Bruce Nuclear Power Development.

APPENDIX

A: highlights of public consultation

Public consultation in the preparation of the *Owen Sound District Land Use Guidelines* began with the holding of one open house in Owen Sound on June 18, 1982. The public was asked to comment on the accuracy of the information and to provide any additional knowledge they had of the planning area and raise any problems or issues they felt should be addressed during the process. A total of 96 people attended the open house and submitted 23 completed comment sheets (Tables 1 and 2).

In July, 1982 a draft *Owen Sound District Land Use Strategy* was released. An open house was held in Walkerton on August 20 and 21, 1982 with another open house held in Owen Sound on August 27 and 28, 1982. The open houses were held to explain the direction proposed and to invite public comment. A total of 270 people attended the open houses and completed 47 comment sheets. In addition to the open houses, meetings were held with municipalities and interest groups at their request.

As of November 1, 1982 approximately 500 draft reports have been distributed to individuals and a wide range of interest groups. A total of 130 comments have been received (Tables 1 and 2).

Based on the analysis and evaluation of the public input received, this document was prepared. The Minister personally reviewed the district summary and analysis of public comment and discussed the proposed *Land Use Guidelines* with the District Manager. In addition, the Minister held a series of public forums across the province to hear first-hand the views of interested groups and individuals.

Copies of comments received are available for viewing in the Owen Sound District office, the ministry's main office public reading room and the Legislative Library at Queen's Park.

TABLE 1 SUMMARY OF CONTACTS(1)

Number of Background Information Open Houses	1
Background Open House Attendance	46
Number of Draft Strategy Open Houses	2
Draft Strategy Open House Attendance	270
Comment Sheets Distributed	500
Draft Strategies Distributed	500
Phone Calls Received	0
Speeches Made	0
Meetings with Municipalities	5
Meetings with Conservation Authorities	2
Meetings with Other Agencies	0
Meetings with Interest Groups	0
Interviews with Media	8

(1) Received by November 1, 1982

TABLE 2 SUMMARY OF RESPONSES[1]

Response Documentation / Category of Respondent	Individual	Conservation Authority	Government Agency	M.P.P.	Municipality	Interest Group	Industry	Category Unknown	Total of All Categories
Background Open House Comment Sheet	14	2	1		2	2	2		23
Background Open House Record of Conversation									
Draft Strategy Open House Comment Sheet	30		1		1	1			33
Draft Strategy Open House Record of Conversation									
Mailed Comment Sheet	12					2			14
Letter/Brief	15	2	6		11	20	2		56
Record of Conversation Meeting Minutes					4				4
	71	4	8		18	25	4		130

(1) Received by November 1, 1982

Candidate Park
An area designated in Ministry of Natural Resources *Land Use Guidelines* which may be given official status as a park at some time in the future.

Capability
The natural ability of an area to provide continuous opportunity for benefits under an assumed level of management.

Capacity
The upper limit to which an area of land, or water, may be used or developed without an undesirable change taking place in the environment. Also called carrying capacity.

Coldwater Habitat
Waterbodies having characteristics that support coldwater fish species, such as trout, whitefish, ciscoe.

Commercial Fishing
The taking for sale of fish other than game fish, by means of any hook-line, trolling line, spear, minnow-trap, dip-net, gill-net, hoop-net, pound-net, seine-net, trammel-net, trap-net or trawl-net.

Crown Land
All land (including land under water) held by the province, both land which has never been sold and land which has been re-acquired.

Earth Science Feature
Public or private land where landforms of provincial interest have been identified.

Fish Community
An aggregation of different fish species living and interacting together.

Forestry Purposes
Includes the production of wood and wood products, provision of proper environmental conditions for wildlife, protection against floods and erosion, recreation and protection and production of water supplies.

Fur-bearers
Animals having commercially valuable pelts including beaver, mink, marten, otter, muskrat, fisher, fox, raccoon, wolf, lynx.

Goal
A general purpose to which the ministry aspires.

Habitat
The place or type of site where an animal or plant naturally or normally lives.

Hazard Land
Land, which because of its physical characteristics in combination with its location present a risk for its occupants including loss of life, property damage and social disruption (eg. flooding).

Historical Park
A park area selected to represent the distinctive historical resources of the province in an open space setting, and protected for interpretive, educational and research purposes.

Integrated Resource Management
The coordination of resource management programs to ensure that conflicts are minimized and that management which would benefit several programs is encouraged. Integrated management encourages multiple use, but recognizes that in some circumstances management of areas for a single purpose may be necessary.

Interim Property Management
To provide management of land acquired by the ministry until such time as management is assumed by the intended user group.

Interim Use
Land and resource use and management practices which are permitted to occur over a period of time prior to the initiation of another identified use.

Land Use Guidelines
A document which displays direction concerning the use of land and water in a defined area. It identifies where and how the ministry intends to

achieve its objectives in a specific district through the use of Crown land and through influencing the use of private land.

Land Use Planning
A process which culminates in a direction regarding the use of land.

Life Science Feature
Public or private land where a natural habitat of provincial interest has been identified.

Management
The judicious use of means to achieve ends. Management may have various levels of intensity.

Multiple Use
A resource management or planning concept applied to very large areas to indicate that all basic uses are accommodated. Typically, two or more uses may occur on the same general areas at the same time or in sequence.

Natural Environment Park
An area incorporating outstanding recreation landscapes with representative natural features and historical resources to provide high quality recreational and educational experiences.

Nature Reserve
An area selected to represent the distinctive natural habitats and landforms of the province, and are protected for educational and research purposes to benefit present and future generations.

Objective
A quantifiable end result to be achieved.

Occasion
A measure of actual recreational use describing the number of times a recreation resource or facility is used by individuals in a given time period. An occasion is considered not to exceed one day in duration.

Operational Plan
A part of a resource management plan stating the extent (includes human and financial resources) of all work of any nature to be carried out during one or more years of the management period.

Opportunity
A measure of recreation supply. It is used to describe the number of times a resource or facility can be used (occasions of use) in a given time period. An opportunity is considered not to be greater than one day.

Optimum Sustainable Yield
The concept refers to the maximum level of resource harvest which can be sustained on a long-term basis without causing detrimental effects on the resource base.

Policy
A decision concerning the objectives to be achieved and the means of achieving them.

Production Forest Land
An area dedicated to the growing of merchantable timber or the production of other forest products.

Productive Forest Land
Those lower capability agricultural lands, both forested and open and higher capability lands with existing forest cover, from which the ministry hopes to achieve their forestry targets.

Program
An activity undertaken by the ministry to provide a service or manage a particular resource.

Proposed Candidate Park
An area having park potential which has been identified for public review and feasibility analysis through the ministry's land use planning process.

Public Land
Any land owned or administered by a public body or agency. It includes federal, provincial and municipally-owned lands and lands held by agencies such as parks commissions and conservation authorities.

Recreation Park
An area which supports a wide variety of outdoor recreation opportunities for large numbers of people in attractive surroundings.

Resource
Any commodity that meets a need.

Resource Management
The control and coordination of the use of resources to achieve specific ends. Commonly applied in particular natural resources.

Resource Management Plan
A plan by which the policies, objectives and targets usually of an individual program (except in the case of an integrated resource management plan) are implemented for a specific resource.

Sequential Use
Where one use is followed by another in planned sequence.

Site District
A fairly large subdivision of a site region based on a characteristic pattern of climate and landform

features.

Sport Fish
For the purpose of this document, sport fish are *the top predator species sought after by anglers.*

Strategy
Planned actions or measures to achieve a desired end.

Target
A quantified end to be achieved or completed by a specific date.

Waterway Park
An area of outstanding recreational water routes with representative natural features and historical resources to provide high quality recreational and educational experiences.

Wilderness Park
A substantial area where the forces of nature are permitted to function freely, and where visitors travel by non-mechanized means and experience solitude, challenge and personal integration with nature.

Work Plan
A plan prepared annually which defines what management activities are to be undertaken for that year.

OWEN SOUND DISTRICT

GENERAL RESOURCE AREAS

5 0 5 10 15 20 Kilometres

5 0 5 10 15 Miles

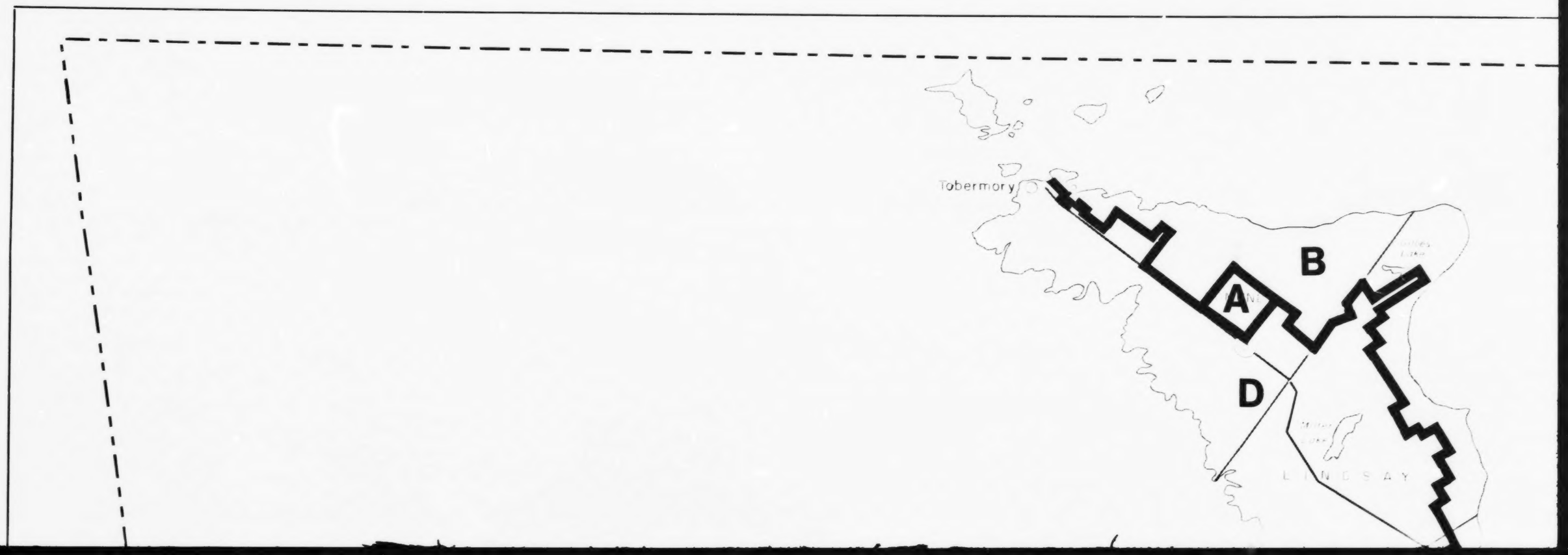
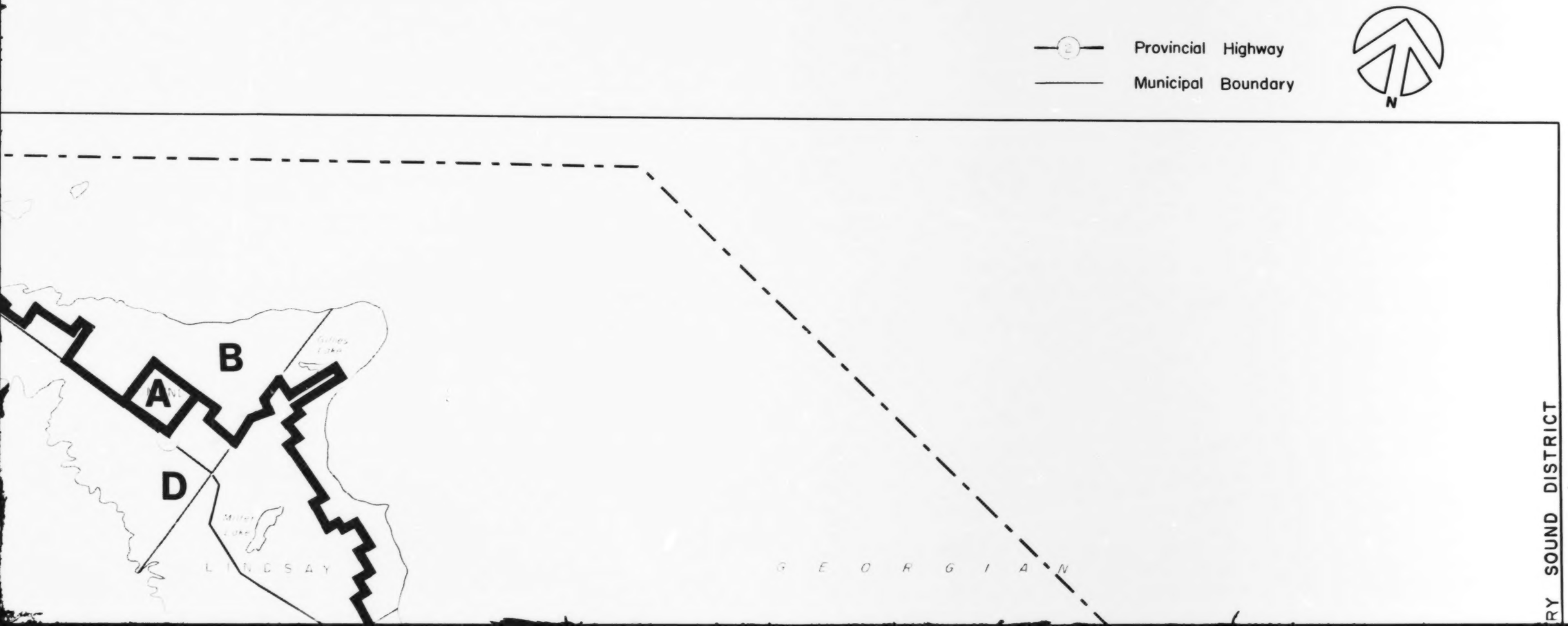


Figure 7


Provincial Highway
Municipal Boundary
N
A
B
D
LINDSAY
GEORGIAN
BAY SOUND DISTRICT

A: URBAN, INDIAN RESERVES AND FEDERAL LAND

General Description

- Normally there is very little resource management in urban areas. However, programs may be involved in the protection of natural resources through fisheries management along rivers such as the Beaver, Sydenham, and Saugeen as well as the hazard land policy which also protects life and property.
- The Meaford Tank Range is important for the maintenance of the deer herd in the north half of Grey County.

B: NIAGARA ESCARPMENT PLANNING AREA

General Description

- The Niagara Escarpment Area shown is the area for which the Niagara Escarpment Commission is preparing a plan.
- The area has extremely significant natural resources including large forested areas with important tracts on Crown Land and in Agreement Forests, mineral resources, wildlife and fisheries habitat, and areas of natural and scientific interest.
- All programs will comply with the policies and guidelines in the Niagara Escarpment Plan when approved. Otherwise, management activities which protect the integrity and uniqueness of the area will be encouraged.

C: MULTIPLE RESOURCE MANAGEMENT

General Description

- Areas where natural resources such as headwater and source areas, cold water streams, deer habitat, high quality sand and gravel deposits, areas of natural and scientific interest and large, highly productive woodlots are located throughout agricultural lands.
- Characterized by deep to shallow glacial deposits with moderate to steep slopes.

Resource Management Guidelines

- Ministry efforts will be directed towards encouraging forestry, mineral resources, fish and wildlife, and outdoor recreational activities.
- Other uses include rural, residential, and agriculture.

D: OUTDOOR RECREATION MANAGEMENT

General Description

- Shallow soils to exposed bedrock with poor drainage, wetlands, forest cover, and wildlife habitat.
- Need to protect, manage, and enhance wildlife habitat and areas of natural and scientific interest.

Resource Management Guidelines

- Ministry efforts will be directed towards encouraging outdoor recreational and fish and wildlife recreational activities. Some forest management activities will occur on specific sites such as the Rankin Resources Management Area.
- Other uses include seasonal, residential, and tourist outfitting.

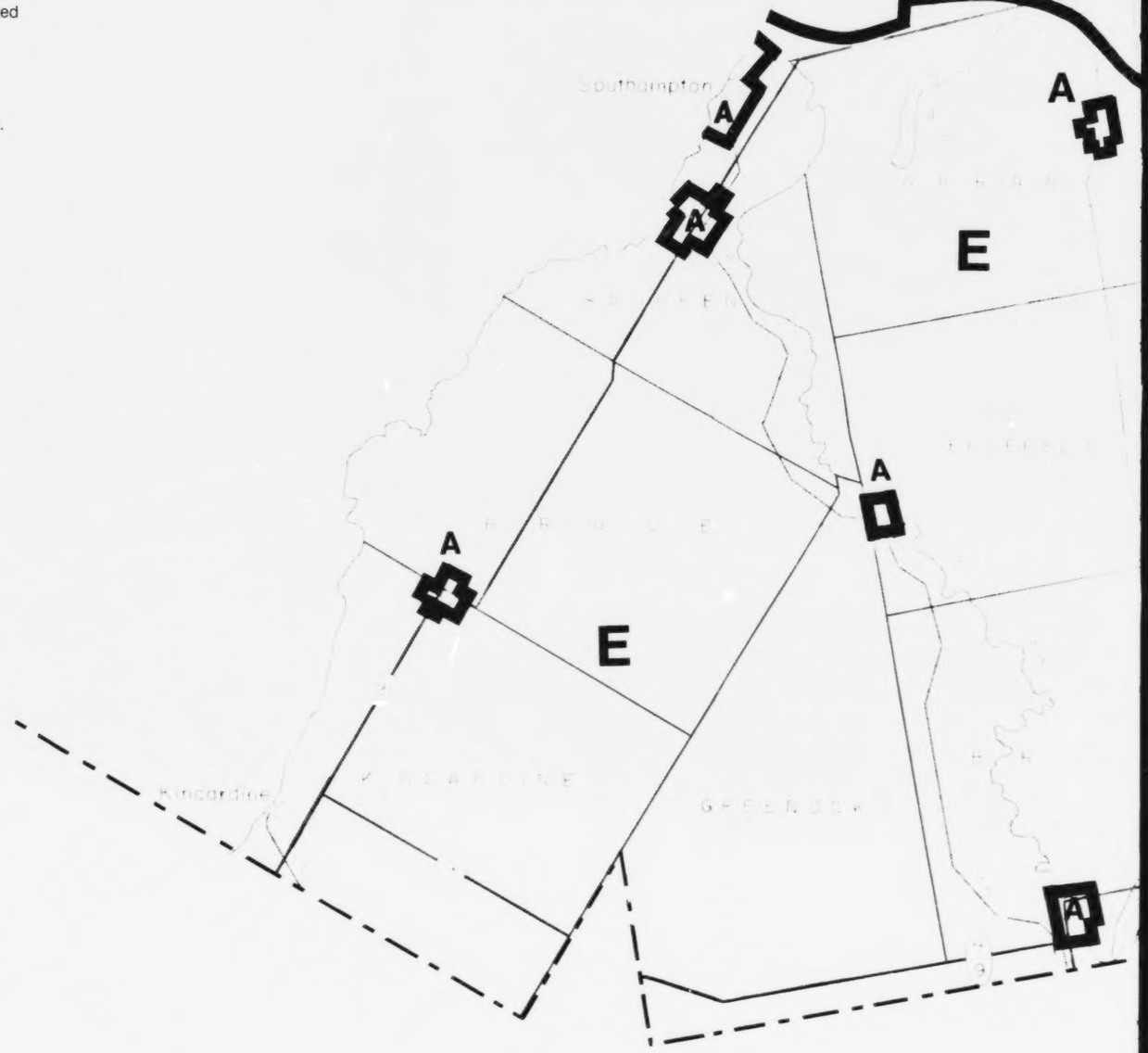
E: GENERAL RURAL AREA

PARRY SOUND DISTRICT
G E O R G I A N
B A Y
A
D
F
B
E
C
A
Sound

- Ministry efforts will be directed towards encouraging forestry, and fish and wildlife related recreational activities.
- Other uses include rural, residential, and agriculture.

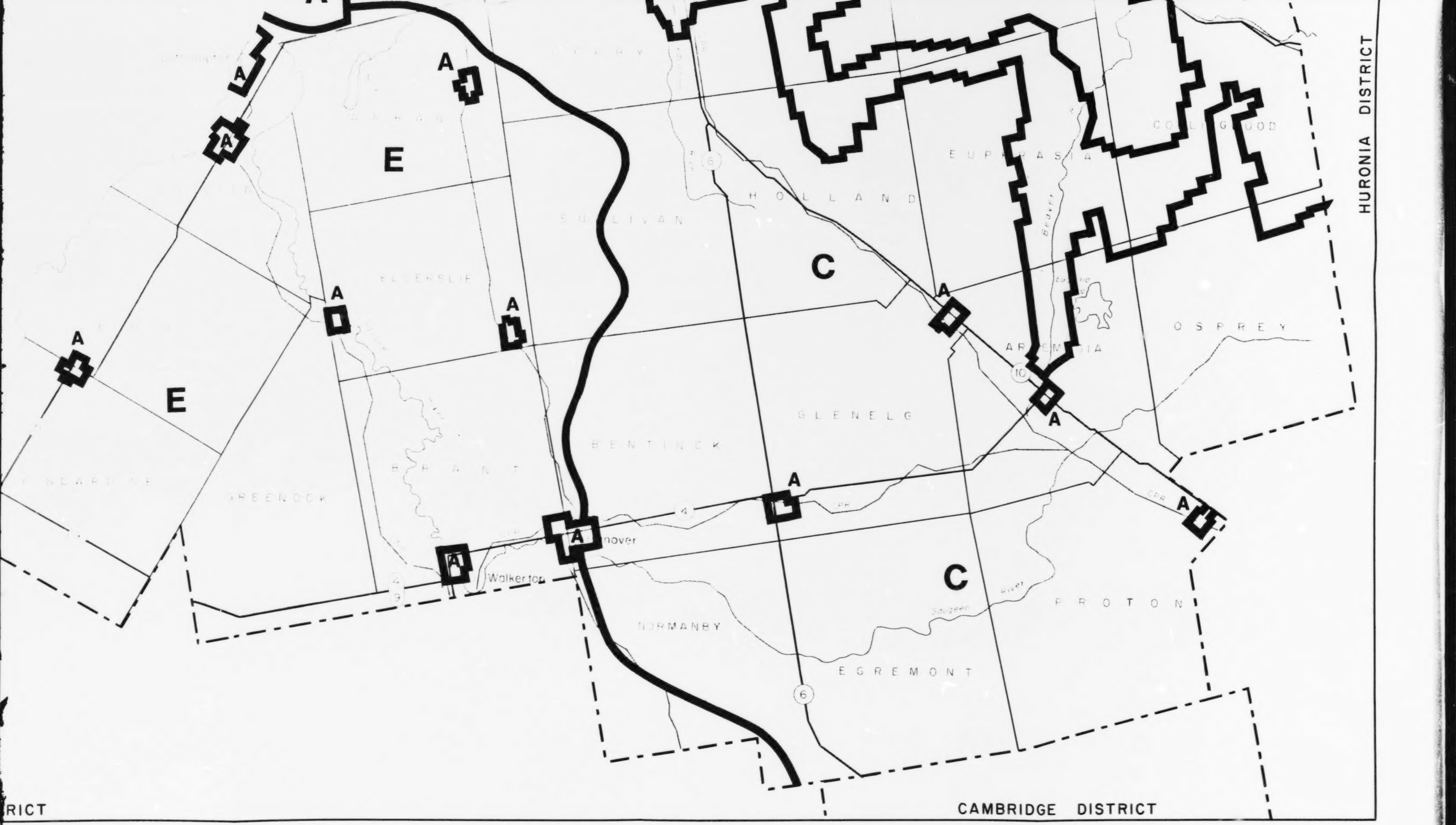
F: LAKE HURON AND GEORGIAN BAY

General Description
- These waters will be very important for water-related recreation and fisheries programs.



Ministry of Natural Resources
Ontario

WINGHAM DISTRICT


HURONIA DISTRICT
E
E
C
C
A
A
A

OWEN SOUND DISTRICT

SUMMARY OF TARGETS

Figure 1